MITSUBISHI ELECTRIC

ENGLISH

OTHERS

DIGITAL RECORDER
INSTALLATION AND OPERATION MANUAL

MODEL

DX-NT400E

CE

THIS INSTRUCTION MANUAL IS IMPORTANT TO YOU. PLEASE READ IT BEFORE USING YOUR DIGITAL RECORDER.

Features

DX-NT400E Digital Recorder

Owning to a WEVELET method, high picture quality recording of more than 450 lines for the horizontal resolution and extended recording time are realized. The DX-NT400E has 5 user selectable recording picture grades and 12 recording time modes. The DX-NT400E also has a built-in 4 camera multiplexer with motion detection per input. Individual field recording per input in both normal and alarm recording are supported. Normal VCR like functions such as a menu, timer and rear terminals are featured.

Built-in 4-input multiplexer functions

• Split-screen display
The screen mode can be switched such as single screen, SPLIT4 screen and sequential screen display.

• Motion detection
This function detects moving objects captured by any of the 4 cameras connected to the unit, and initiates alarm recording. The following settings can be made separately as desired: motion detection area, detection area divided by 16 x 12 dots, sensitivity of motion detection, minimum dot-count for initiating alarm recording, and restriction of motion detection function.

• Operational status display function
The operational status of this unit can be displayed on the top or bottom of the screen.

Various recording functions

By completely separating normal recording settings and alarm recording settings, further detailed settings are possible such as changing the recording intervals only for the camera input with alarm signals while maintaining normal recording settings as they are.

• Emergency recording
When the emergency signal is input, the unit starts recording forcibly in the maximum recording interval and the maximum recording picture quality by using the camera specified for alarm recording or normal recording.

• Mirror recording
Mirror recording to prevent data loss due to the HDD crash is available.

• Partition recording
Alarm images can be recorded in a designated area within HDD to keep alarm images longer than normal recording. The partition area can be set from 10% to 90% of HDD capacity.

• Recording interval setting for each camera
The recording intervals and recording picture quality can be set individually for each connected camera.

Network

• On the personal computer connected to the Internet using Microsoft Internet Explorer, the image screen such as live images, search and playback image can be displayed.
• The MODE OUT terminals which can be controlled via PC are equipped. (The specified application is required.)

• E-mail/Alarm notification function
The message of warning signal or status change of the unit can be transmitted to the personal computer. (The specified application is required.)

• LAN software for applications in great variety
Optional software with high-quality communication functions.

Timer recording operation

• Timer recording program
4 types of camera patterns, recording intervals, recording picture quality for normal recording and alarm recording can be registered. Furthermore, individual settings can be made for pre-alarm recording and motion detection function as well.

• Timer holiday specification
Holidays throughout the year can be set in advance.

Versatile functions to support surveillance

• Removable HDD tray
Owning to the removable structure, attaching or removing the HDD is possible. The removable HDD tray supports the high-capacity HDD (supports 2 TB per ID).

• Audio recording function
1-channel PCM audio recording mode is featured.

• Image-alteration recognition function
Processing of each image recorded using a proprietary image-alteration recognition technology.

• Excellent expandablility
Standard RS-232C interface for remote PC control, and various control terminals are equipped.

• Pre-alarm Recording function
Recording of images before the alarm sensor detects disturbances is also available.

• Simultaneous recording/playback function
Recorded data on the hard disk can be played back while recording.

• Variety of search functions
Pressing the SEARCH button on the remote control displays the SEARCH menu for immediate search operation. This function is convenient when repeatedly performing searches.

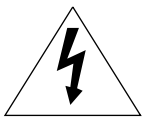
• Covert camera function
You can set the video of the specified camera number not to be displayed regardless of its presence.

Ease of use

• Auto set-up
By selecting only the recording period, the unit assigns recording interval and picture grade automatically for all the channels and other menu settings are set to the default.

Microsoft is either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

IMPORTANT



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

HEAVY OBJECTS SHOULD NEVER BE PLACED ON THE UNIT (E.G., TV)

NEVER TOUCH OR INSERT ANY OBJECT INSIDE THE UNIT

Touching the inside of the cabinet or inserting foreign objects of any kind not only creates a safety hazard but can also cause extensive damage.

PROTECT THE POWER CORD

Damage to the power cord may cause fire or shock hazard. If the mains cord is damaged, switch off the mains outlet and carefully unplug the cord by holding the mains plug.

UNPLUG THE POWER CORD DURING A LONG ABSENCE

Turn off the power and unplug the power cord during a long absence.

MAINTAIN GOOD VENTILATION

Do not obstruct the many ventilation holes on the unit. For maximum ventilation, leave some space around the unit and place the unit on a hard level surface only, and ensure it is not covered during use. Heavy objects should never be placed on the unit.

WHEN NOT IN USE

When not in use always turn OFF the MAIN switch.

CABINET CARE

Never use petroleum-based cleaners. Clean with a soft cloth moistened with soap and water and wipe dry.

PVC cables or leads should not be left in contact with the cabinet surface for long periods.

INSTALLATION LOCATION

For excellent performance and lasting reliability install in a location that is:-

1. Well ventilated, out of direct sunlight and away from direct heat.
2. A solid vibration-free surface.
3. Free from high humidity, excessive dust and away from magnetic fields.
4. Please ensure that the ventilation fan located on the unit's back panel is not blocked.

UNSUITABLE LOCATIONS

Placing the unit in the following places might shorten the product life:

- **Extremely cold places, such as refrigerated warehouses and ice houses**
- **Places where excessive hydrogen sulfide is likely to be generated, such as hot-springs areas**
- **Places or locations with salt air environment.**

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. THIS APPARATUS MUST BE GROUNDED.

MAINS LEAD CONNECTION

The mains lead on this unit is fitted with a non-rewireable mains plug, incorporating a 5A fuse. If you need to replace the fuse, use a 5A fuse approved by BSI or ASTA to BS 1362, ensuring you refit the fuse cover. If the mains plug is not suitable for the sockets in your home, and you require to remove the plug, remove the fuse, cut off the plug then dispose of the plug immediately, to avoid a possible electric shock hazard. To refit a new plug, follow these instructions; Green-and-yellow: Earth, Blue: Neutral and Brown: Live. As the colours in the mains lead of this unit may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

- **The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.**
- **The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.**
- **The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.**

This unit complies with the requirements of the EC Directive 89/336/EEC, "EMC Directive" and 73/23/EEC, "Low Voltage Directive", as amended by Directive 93/68/EEC. The requirements for the susceptibility according to EN 55024 and the requirements for interference according to EN 55022 are observed for the operation on residential areas, business, light industrial premises and in small scale enterprises, inside as well as outside of the building. All places of operation are characterised by their connection to the public low voltage power supply system. This unit is manufactured in accordance with EN 60950.

Notice about construction of the surveillance system using this unit

- **This unit can be controlled by the external devices via RS-232C terminal or ETHERNET terminal. This unit can also be used to contol the external devices via RS-232C terminal. Owning to these functions, this unit flexibly applies to the high grade security system, but the whole surveillance system may be affected by the malfunction of this unit or the external devices depending on the setting contents of this unit or the connection or combination between the external devices.**
- **When configuring a surveillance system using this unit, it is recommended to confirm first that this unit operates normally with the other devices connected or combined.**
- **It is recommended to copy or back up the impotant recorded contents to the other devices periodically.**
- **Damages arising out of any operational error of the surveillance system or loss of the recorded data or any other damages because of any malfunction of this unit are not covered.**

There may be cases when the unit's built-in MOTION DETECTION function does not operate properly due to external condition or video input signal or other factors.

The user will not be indemnified for problems (e.g., recording failure or playback failure) that occur with either the unit or a connected device during operation. It is recommended that backups of important recordings are made regularly as a precaution against possible breakdowns and accidents.

Recordable time and product warranty

Continuous recordable time and the estimated time displayed on the menu screen is the continuous recordable time when operating this unit and is not the warranty period of the product. Furthermore, it is not the period that guarantees the operation of used parts.

- **This unit uses a hard disk, which is a precision device. Please handle this unit with sufficient care.**
- **Do not subject this unit to vibrations or shocks. This may cause trouble specially when the power of the unit is turned on or when the hard disk is being accessed, and sufficient care is required.**
- **Do not disconnect the power plug while the power of the unit is turned on or while recording or playing.**
- **For early detection of faults, we recommend that you request inspection once a year.**

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How to read this manual

• Viewing displays

➲ (Refer to this information when operating)
Reference information concerning operation is described.

ⓘ (Caution required)
Cautionary items concerning operation are described.

☞ (See reference page)
Reference item and page number are indicated.

INFORMATION (Reference)
Other reference information is described.

• Finding desired information
There is "Contents" at the beginning of this manual. In addition, reference pages are indicated throughout this manual.

• Troubleshooting
Read Troubleshooting (pages 79, 80) for possible remedies to the problem.

A hard disk is a precision instrument.
It will become the cause of failure if the unit is moved during the power is turned ON or a shock is given. Please do not carry out by any means.

Flowchart

■ Flowchart for connection and settings

Installation example:
Connect the terminals on the rear panel; and set the initial settings. Next, make an alarm recording using the timer function, using alarm list search, and playback the searched data.

Connections

- **Connect the terminals on the rear panel.**
  - **☞ See "■ Connecting to CCTV camera, monitor, and sensor" on page 12.**
- **Connection for the alarm recording.**
  - **☞ See "■ Alarm recording connection" on page 13, and "■ Rear view" on page 9.**
- **Connect the supplied wired remote control (R-400).**
  - **☞ See "■ Connecting the wired remote control R-400 (supplied)" on page 13.**

▼

Attaching the HDD

- **Attach the HDD to this unit.**
  - **☞ See "■ Attaching and Removing the HDD to the DX-NT400E" on pages 14 to 17.**

▼

Setting up the unit

- **Test the HDD attached to the unit.**
  - **☞ See "■ HDD SELF TEST" on pages 18 and 19.**
- **Set up the unit using <AUTO SET UP> menu.**
  - **☞ See "■ AUTO SET UP" on pages 20 and 21.**

▼

The unit boots-up.

▼

Changing the initial menu settings

- **Select the language.**
  - **☞ See "■ LANGUAGE SELECTION" on page 28.**
- **Set the present time and screen display.**
  - **☞ See "<TIME DATE/DISPLAY SETTINGS>" on pages 34 and 35.**
  - **Set the present time.**
    - **☞ See "♦ TIME DATE ADJUST" on page 24.**
  - **Set the display mode.**
    - **☞ See "■ DISPLAY MODE" on page 34.**

▼

Setting the HDD (hard disk drive) mode

- **Set the repeat recording.**
  - **☞ See "♦ HDD REPEAT REC MAIN/HDD REPEAT REC SUB" on page 47.**
- **Set the audio recording.**
  - **☞ See "■ AUDIO RECORDING" on page 48, and "■ Continuous recording time table" on page 77.**
- **Set the remaining HDD capacity.**
  - **☞ See "■ REMAIN HDD" on page 50.**
- **Set the CALL OUT.**
  - **☞ See "• HDD MAIN REMAIN/HDD SUB REMAIN" on page 50, and "• HDD MAIN FULL/HDD SUB FULL" on page 51.**
- **Set the buzzer.**
  - **☞ See "■ BUZZER" on pages 49 and 50.**

▼

Changing the multiplexer function

- **Change the SPLIT4 screen setting.**
  - **☞ See "■ SPLIT4 SCREEN SETTING" on page 37.**
- **Change the sequence setting.**
  - **☞ See "■ SEQUENCE SETTING" on page 37.**

▼

Setting other various functions

- **Change the display mode.**
  - **☞ See "■ CLOCK LOCATION SETTING" on page 34, and "■ DUPLEX MODE DISPLAY" on page 35.**
- **Set the camera title/memo.**
  - **☞ See "■ CAMERA TITLE/MEMO SETTING"on pages 34 and 35, and "■ CAMERA DISPLAY" on page 34.**
- **Set to output signals of the unit status.**
  - **☞ See "♦ MODE OUT 1 to MODE OUT 5" on page 49.**

Setting the motion detection

- Select the camera number.
  - ☞ See "■ SELECTION CAMERA NUMBER" on page 38.
- Set the detection areas.
  - ☞ See "■ DETECTION MASK SETTING" on page 38.
- Set the sensitivity.
  - ☞ See "■ SENSITIVITY" on page 39.
- Set the minimum number of dots for starting the motion detecting operation.
  - ☞ See "■ MOTION THRESHOLD" on page 39.
- Set the restriction of motion detection function.
  - ☞ See "■ MD LOCK OUT TIME" on page 40.

Setting the timer recording

- Select the normal & alarm recording or pre-alarm recording.
  - ☞ See "■ Recording mode settings A to D for normal recording and alarm recording" on page 46.
  - Set the recording mode.
    - Select the camera selection during the alarm recording.
      - ☞ See "■ Recording mode settings for normal recording and alarm recording" on pages 41 to 43.
    - Set the interval/picture grade for normal recording and alarm recording.
      - ☞ See "■ Setting the recording interval and recording picture quality for normal recording" on pages 25 and 26.
  - Set the duration of alarm recording.
    - ☞ See "■ ALARM REC DURATION" on page 46.
  - Set the duration of pre-alarm recording.
    - ☞ See "♦ PRE ALARM REC" on page 43, and "■ Pre-alarm recording time table" on pages 77 and 78.
- Set the timer program mode.
  - ☞ See "<TIMER PROGRAM SETTINGS>" on pages 44 to 46.
  - Set the holiday.
    - ☞ See "■ HOLIDAY SETTING" on page 46.
  - Set the timer program.
    - ☞ See "♦ Structure of the <TIMER PROGRAM> screen" on pages 44 and 45.
    - Selecting the day.
    - Selecting the start time.
    - Selecting the end time.
    - Selecting the recording mode.
    - Selecting the motion detection mode.

Timer recording is executed/completed

☞ See "■ Warnings and their appropriate countermeasures" on page 81.

Searching the recorded data

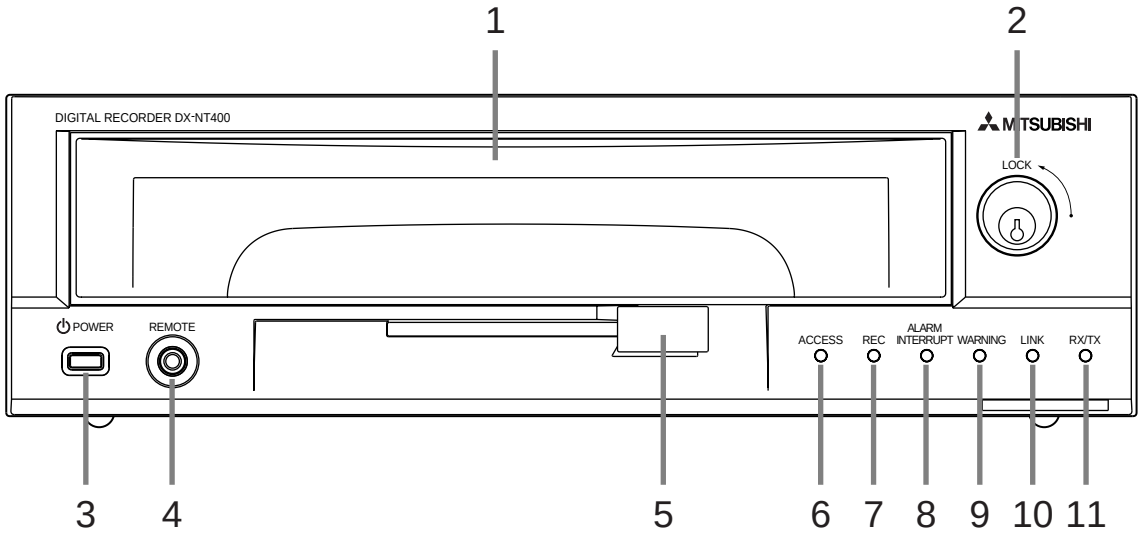
- Set the device to be searched.
  - ☞ See "♦ PLAYBACK DEVICE" on page 63.
- Select the camera number to be searched.
  - ☞ See "♦ SELECTION CAMERA NUMBER" on page 63.
- Select the search mode.
  - ☞ See "♦ SEARCH TYPE" on page 63.
- Set the alarm list search.
  - ☞ See "■ ALARM LIST SEARCH" on page 66.
- Set the time and date for alarm list search.
  - ☞ See "♦ DATE/TIME" on page 63.

The search is completed/The search result is displayed

Playback the search result

- Select the camera number to be played back.
  - ☞ See "<MPX DISPLAY SETTINGS>" on pages 36 and 37.
- Select the sequence screen.
  - ☞ See "♦ SPLIT/SINGLE, +, and – button" on page 36.
- Playback
  - ☞ See "■ Basic playback" on page 26.
- Select the speed of playback.
  - ☞ See "■ Various playback functions" on page 62.

■ Front view



1. HDD tray
Attach the HDD which is commercially available to here. Due to the removable structure, you can attach or remove the HDD easily.

2. Key
Used to lock the HDD tray. The HDD tray cannot be removed while it is locked.

3. POWER button
When pressing this button while the MAIN switch on the rear panel is set to ON, the power turns on and the button lights up. When pressing the button again, the unit is in standby mode and the light turns off. When the unit is in operational transition such as boot-up, the button flashes and other operations are not accepted.

4. REMOTE jack
Input connector for supplied wired remote control.

5. Lever
Used when attaching or removing the HDD tray.

6. ACCESS indicator
Illuminates while accessing the HDD.

7. REC indicator
Illuminates while recording.

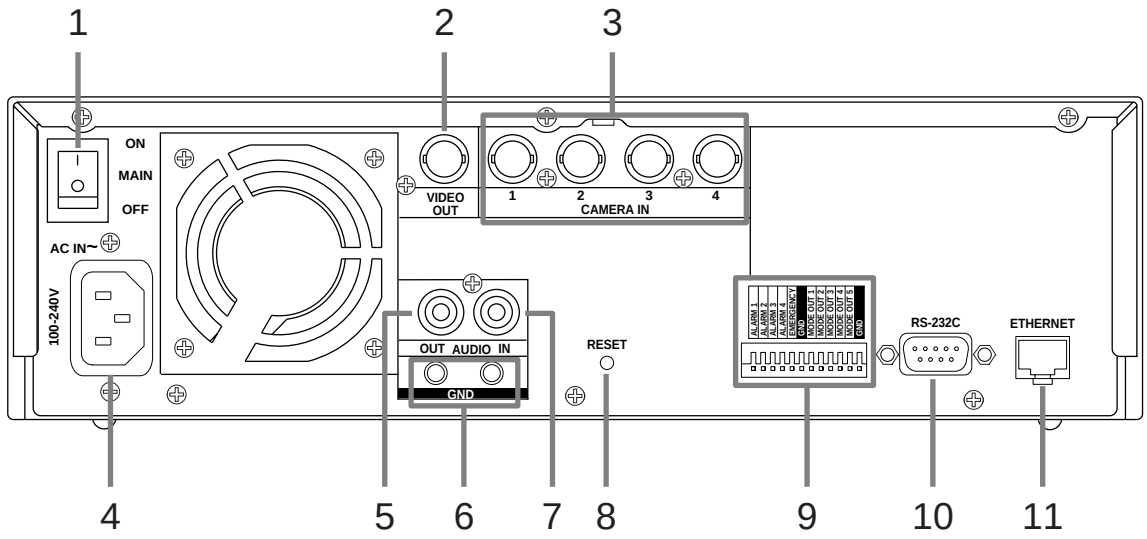
8. ALARM INTERRUPT indicator
When pressing ALARM INTERRUPT button, the unit does not accept alarm signals or motion detection for 5 minutes. During this time, the indicator flashes.

9. WARNING indicator
Illuminates when a warning is displayed on the monitor. To clear the warning display, press the WARNING RESET button for more than 3 seconds.

10. LINK indicator
Illuminates when the link between this unit and the device connected to ETHERNET terminal is fixed.

11. RX/TX indicator
Illuminates while communicating with the device connected to ETHERNET terminal on the rear panel.

■ Rear view



1. MAIN switch
This is the main power switch. When using this unit, set this switch to ON. Otherwise, the power cannot be turned on or off using the POWER button on the front panel.

2. VIDEO OUT connector
Output connector for video signal to monitor (BNC connector).

3. CAMERA IN connectors
Input connector for signal of camera (BNC connector).

ⓘ Only the standard PAL type signal is supported. The unit may malfunction when a out-of-sync signal is input.

4. AC power socket
This socket connects to the power cord. Earth terminal is for safety. Use the 100 - 240 V plug with earth for the power of this unit.

ⓘ This unit must be earthed at all times. Never connect this unit to a power outlet which does not have an earth terminal.

5. AUDIO OUT connector
Output connector for audio signal (RCA pin).

6. GND terminals
It is the common GND terminal.

7. AUDIO IN connector
Input connector for audio signal (RCA pin).

8. RESET button
Pressing this button resets the unit and the power turns off. At this time, video data, menu settings, and the present time are kept.

9. I/O terminals
ALARM IN 1 - 4 terminals
Input terminal for alarm signal.

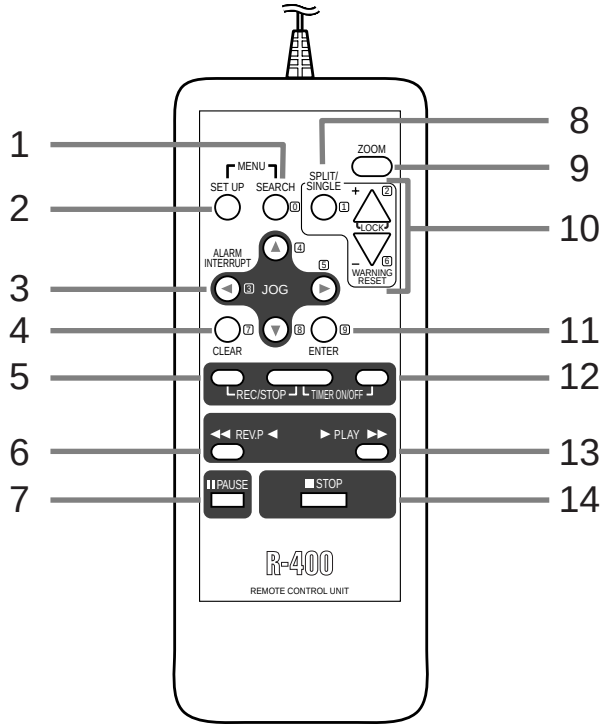
EMERGENCY terminal
Input terminal for shifting the unit mode to emergency recording forcibly.

MODE OUT 1 - 5 terminals
Output terminal to indicate the current status of the unit. Select the status of the unit to be output by “MODE OUT 1” to “MODE OUT 5” in the <REAR TERMINAL SETTINGS> screen.

10. RS-232C connector
This connector is used to connect a host device equipped with RS-232C connector. This unit can be controlled by the other device through this connector.

11. ETHERNET connector
Use the cable applies to 10BASE-T to connect this terminal. The duplex mode is half duplex. Auto negotiation is not supported.

■ Wired remote control R-400 (supplied)



1. SEARCH button
Press to display the search screen.

2. SET UP button
Press to display the <SETTINGS> screen.

3. JOG buttons
Press to move the cursor or change the setting item while displaying the menu screen.
When pressing during still frame playback, the image forwards/reverses frame-by-frame.
Press to move the centre point of the magnification screen vertically or horizontally.

ALARM INTERRUPT button
When pressing this button, the unit does not accept alarm signals or motion detection for 5 minutes. During this time, ALARM INTERRUPT indicator on the front panel flashes.
This button does not function while the menu screen or the search menu is displayed on the monitor.

4. CLEAR button
Press to return to the previous menu layer.

5. REC/STOP buttons
When pressing both buttons, recording starts and the REC indicator on the front panel lights up. When pressing both buttons during recording, recording stops and the REC indicator turns off.
During timer recording, recording does not stop even when both buttons are pressed.

6. REV.P (REVERSE PLAY) button
When pressing this button during stop mode, the reverse playback speed changes in the 4 grades (normal → 25 fields/second reverse playback → 30 MB units → 300 MB units→ normal).

7. PAUSE button
When pressing this button during playback, the still frame playback picture is displayed. When pressing this button again, the unit resumes playback.

8. SPLIT/SINGLE button
Press to switch the display between the single screen display and the split/sequential screen display.

9. ZOOM button
When pressing this button during single screen display, the screen is magnified by 100%, 200%, and 400%.

10. +, – buttons
When pressing these buttons during single screen display, the camera number is switched.
When pressing these buttons during split/sequential screen display, the screen display is switched between the split screen display and the single sequential screen display. (Single sequential screen display is skipped during playback.)

LOCK button (+ button)
Pressing this button for more than 3 seconds while the MAIN switch on the rear panel is turned ON activates simple lock or password lock.
When the password for unlocking is not set, lock function executes in simple lock.
When the password for unlocking is set, lock function executes in password lock.

WARNING RESET button (– button)
Press this button for more than 3 seconds to clear the on-screen warning display or to clear the data.

11. ENTER button
Press to determine the selection when using menus.

12. TIMER ON/OFF buttons

When pressing both buttons, the unit is set to timer recording/standby mode. When pressing both buttons again, timer recording/standby mode is cancelled.

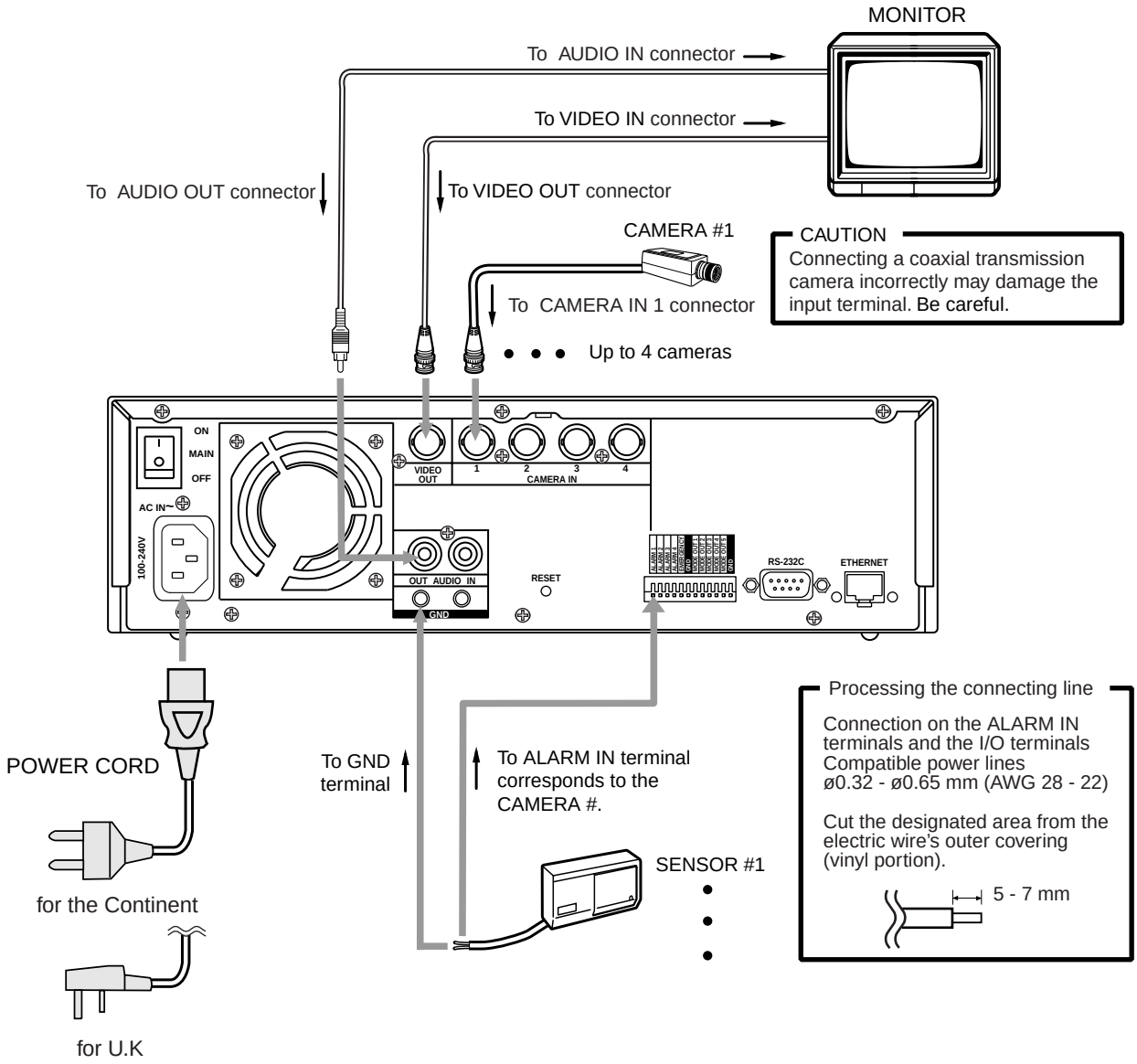
13. PLAY button

When pressing this button during stop mode, the playback speed changes in the 4 grades (normal → 25 fields/second → 30 MB units → 300 MB units→ normal).

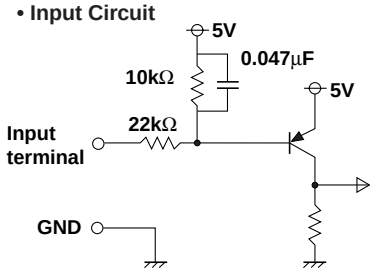
14. STOP button

Press to stop playback.

■ Connecting to CCTV camera, monitor, and sensor

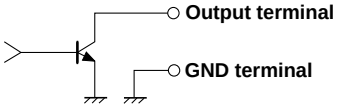


ALARM IN Input terminal
• Input Circuit



<Interface circuit inside the unit>

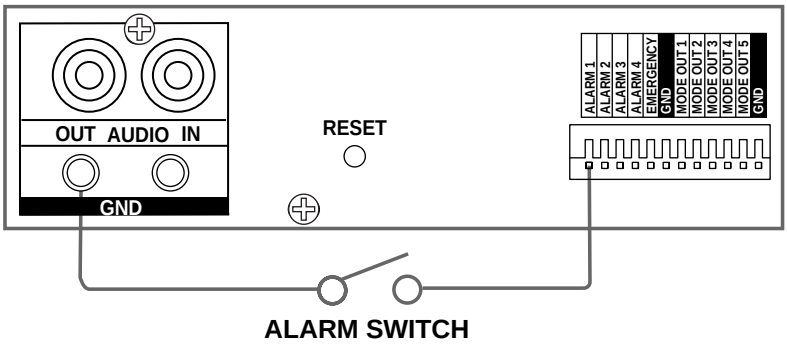
MODE OUT 1 to 5 Output terminal
• Output Circuit



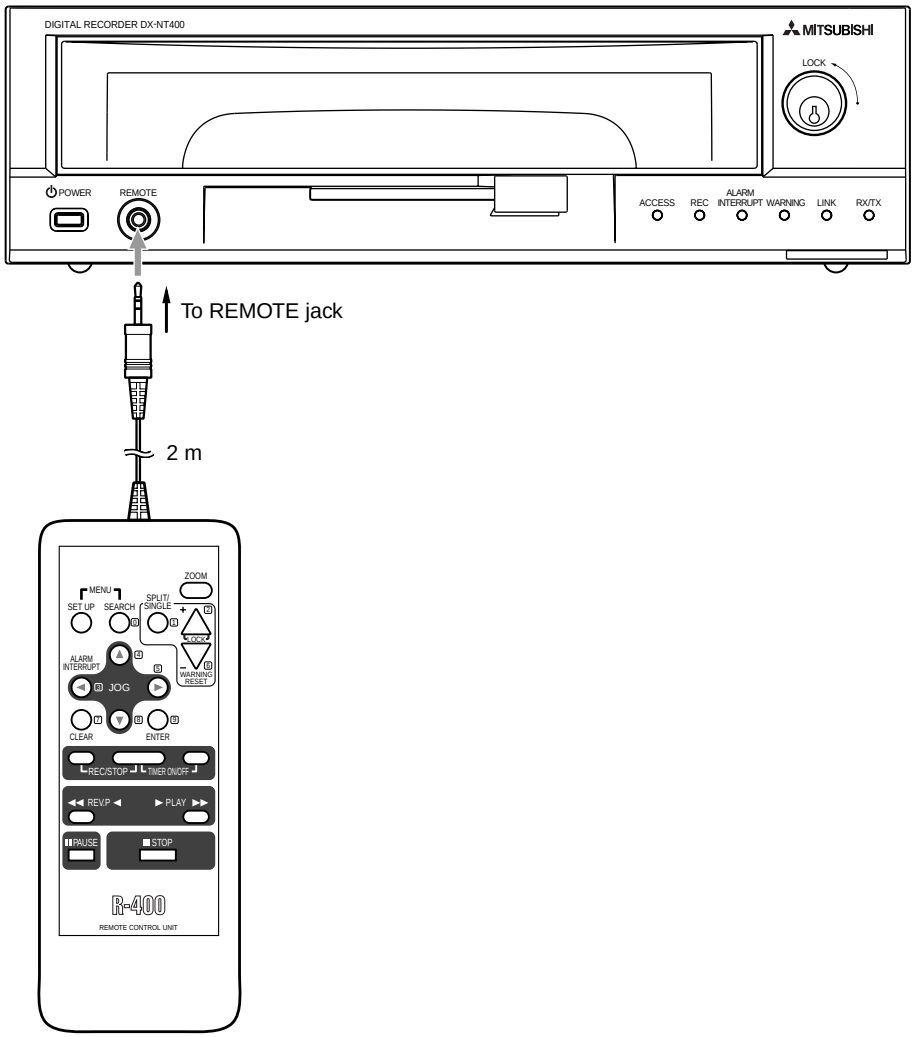
<Interface circuit inside the unit>

■ Alarm recording connection

Example: The diagram below shows an example of connection for alarm signals corresponding to camera number 1.



■ Connecting the wired remote control R-400 (supplied)



Attaching and removing the HDD to the DX-NT400E

ⓘ Make sure that the POWER button on the front panel and the MAIN switch on the rear panel are both turned OFF when attaching or removing the HDD tray.

ⓘ Do not remove the top cover of the unit.

ⓘ HDDs are very sensitive to sudden shocks and vibration which can permanently damage the internal components. To avoid damage to the HDD:
i) Hold tray firmly with both hands while transporting.
ii) DO NOT use an electric screwdriver.
iii) DO NOT place the HDD directly on a desk or table. use a cushion.

ⓘ This unit does not operate when the HDD is not attached. Be sure to attach the HDD before using the unit.

ⓘ When replacing the HDD only for playing back the recorded image, replace the recorded HDD togather with the tray. When you remove the top cover of the tray and remove only one HDD or replace the MASTER HDD or the SLAVE HDD with another one, in most cases the recorded image cannot be played back.

ⓘ When the protection sheet is stuck on the attaching part of the HDD tray on the front of the unit, remove it before using.

➲ The following HDDs have been tested and compatibility is ensured. This information is as of June 2003. Supply of these HDDs may be stopped or they may be changed without notice by their respective manufacturers. Consult your dealer for the latest information or use of other HDDs. When you attach 2 HDDs, normally use the HDDs of the same capacity and the same model name.

<MAXTOR>
4G120J6 (120 GB)
4R120L0 (120 GB)
4R160L0 (160 GB)
4A250J0 (250 GB)
<SEAGATE>
ST3160022ACE (160 GB)

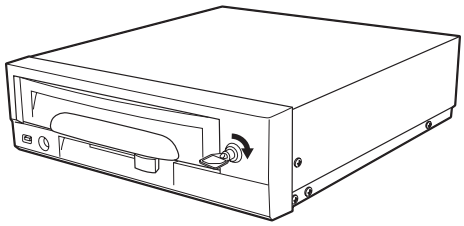
All the company names appearing herein are the property of their respective owners.
The unit may not operate correctly depending on type or condition of the HDD.

➲ Do not attach or remove the HDD tray unnecessarily. The HDD tray is presumed to be removed and attached only a few times a month because of the structure of the connectors.

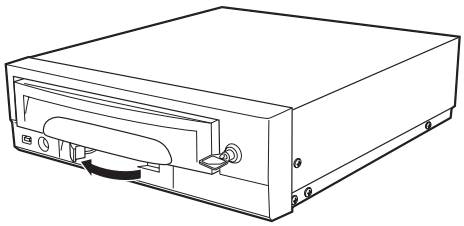
■ Attaching and removing the HDD tray

♦ Removing the HDD tray from the unit

1. *Put the key into the unit and turn it clockwise.*
   - **The lever on the unit is unlocked.**

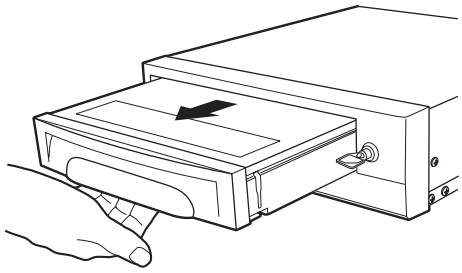


2. *Move the lever to the left.*
   - **The HDD tray is unlocked and ejected.**

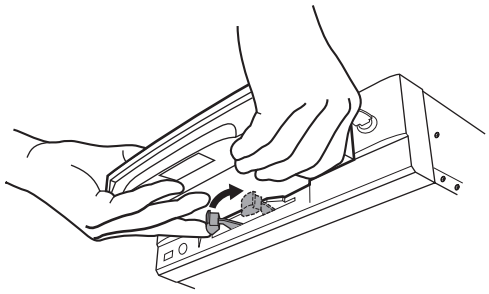


3. *Pull out the HDD tray until it stops.*

   ⓘ See the label on the top cover of the HDD tray.

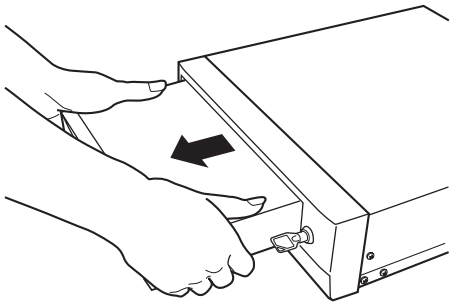


4. *While moving the lever to the right, pull out the HDD tray slightly to unlock the HDD tray.*



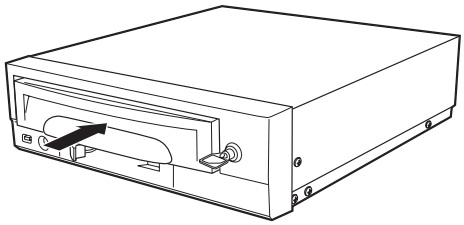
5. *Hold the HDD tray with both hands and pull it out.*

   ⓘ Be sure to use both hands when pulling out the HDD tray in order to prevent the trouble of the HDD or injury due to the fall or the shock.

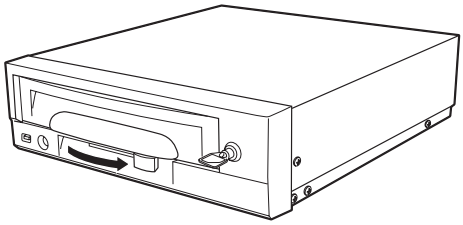


♦ Attaching the HDD tray to the unit

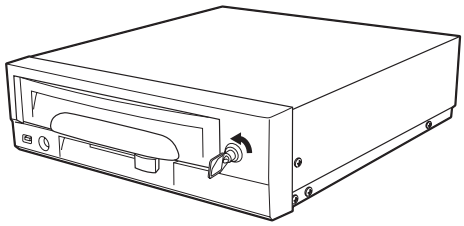
1. *Insert the HDD tray into the unit until it stops.*



2. *Move the lever to the right.*
   - **The HDD tray is fixed to the unit.**



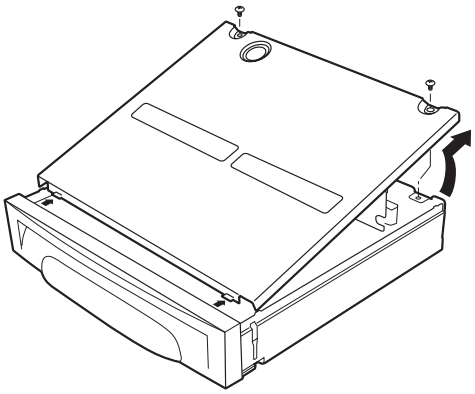
3. *Turn the key counterclockwise to lock the lever and then pull out the key.*



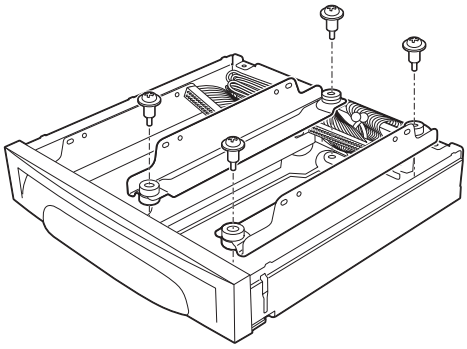
■ Attaching the HDD to the HDD tray

♦ When attaching one HDD:

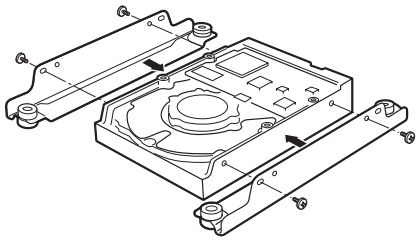
1. *Remove the top cover from the HDD tray.*
   - **Remove the 2 screws and lift the top cover.**



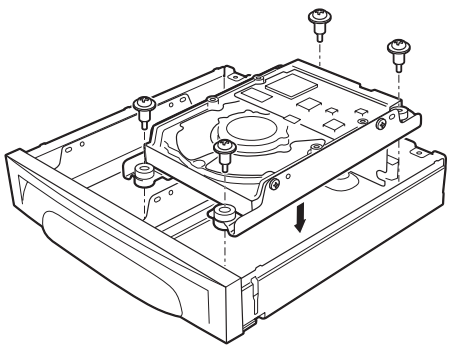
2. *Remove the HDD holder on the right side of the HDD tray.*
   - **Remove the 4 screws attached to the HDD holder to remove the HDD holder.**



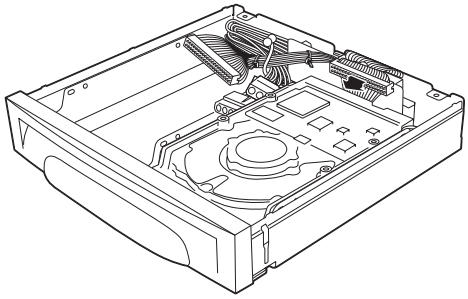
3. *Attach the HDD holder on the side of the HDD.*
   - **Use the supplied 4 screws to attach the HDD holder.**
   - **Set the jumper of the HDD to "MASTER." Refer to the instruction book of HDD for setting the jumper.**



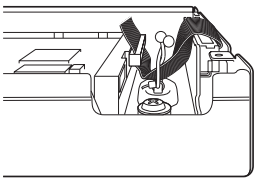
4. *Attach the HDD holder to the HDD tray.*
   - **Use the 4 screws that were removed in step 2.**



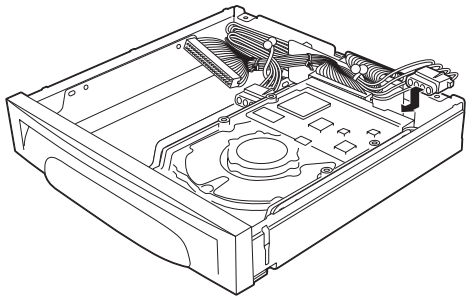
5. *Connect the middle connector of the ATA LEAD to the HDD.*



- **Make sure that the lead between the PCB and the HDD is clamped. (A)**

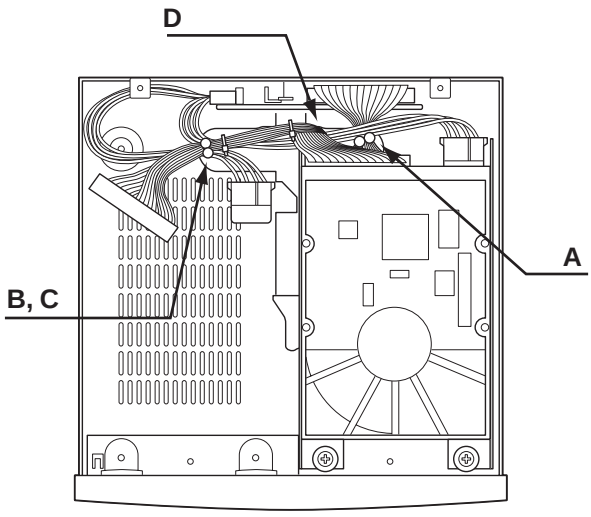


6. *Unclamp the POWER LEAD and connect to the HDD.*
   - **Clamp the POWER LEAD again after connecting to the HDD. (B)**

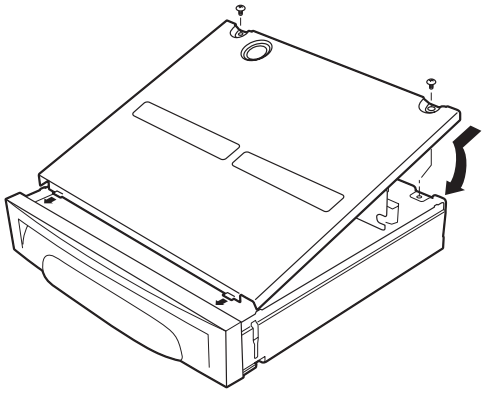


7. *Check the wiring.*

A: The lead between the PCB and the HDD is clamped.
B: The POWER LEAD which is connected to the HDD is clamped.
C: The POWER LEAD and the ATA LEAD that are not connected are clamped near their ends.
D: Push the POWER LEAD and the ATA LEAD between the middle connector and the outer connector into the space between the PCB and the HDD.



8. *Attach the top cover of the HDD tray.*
   - **To attach the top cover, put the hooks of the top cover in the openings of the HDD tray.**
   - **Use the 2 screws that were removed in step 1.**
   - **Make sure that the lead is not caught in the top cover.**

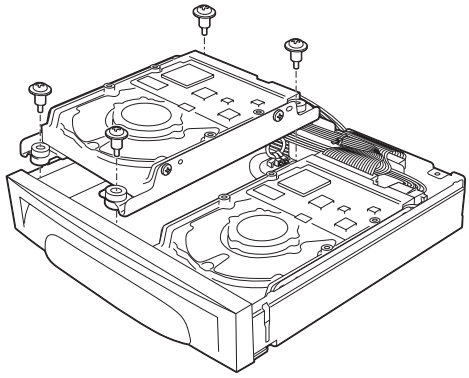


♦ When attaching additional HDD:

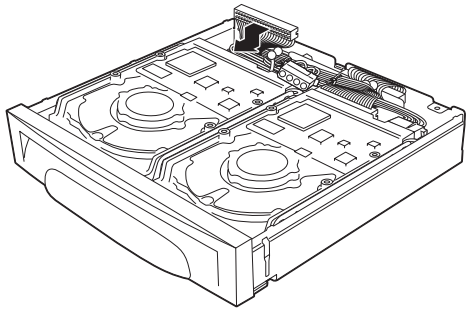
1. *Remove the top cover of the HDD tray.*
   - **Remove the 2 screws and lift the top cover.**

2. *Remove the HDD holder on the left side of the HDD tray.*
   - **Remove the 4 screws attached to the HDD holder to remove the HDD holder.**

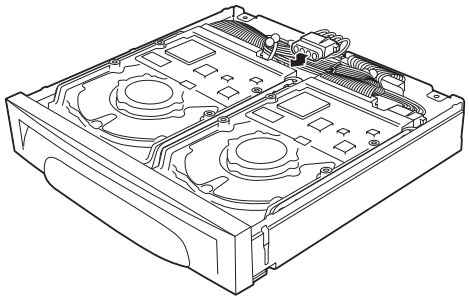
3. *Follow the steps 3 and 4 in "♦ When attaching one HDD:" to attach the HDD holder on the side of the additional HDD, and then attach it to the HDD tray.*
   - **Use the supplied 4 screws to attach the HDD holder.**
   - **Set the jumper of the additional HDD to "SLAVE." Refer to the instruction book of HDD for setting the jumper.**
   - **The leads should not be caught in the HDD holder or the HDD.**



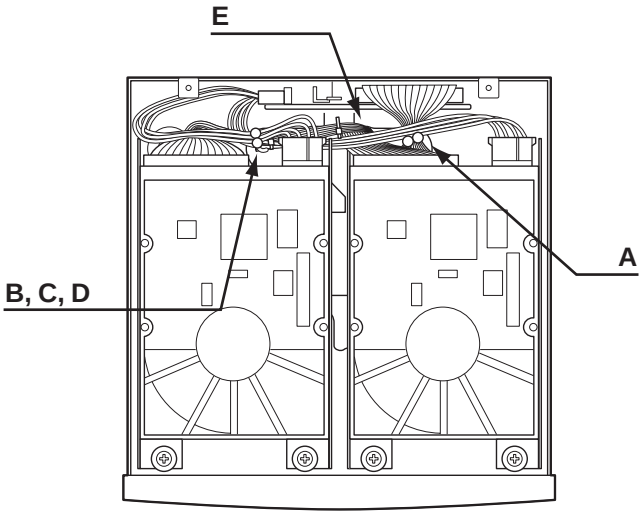
4. *Connect the outer connector of the ATA LEAD to the additional HDD.*
   - **Make sure that the ATA LEAD between the HDDs is clamped. (C)**



5. *Connect the POWER LEAD to the additional HDD.*
   - **Make sure that the POWER LEAD between the HDDs is clamped. (D)**



6. *Check the wiring.*
   A: The lead between the PCB and the HDD is clamped.
   B, D: The POWER LEAD which is connected to the HDD is clamped.
   C: The ATA LEAD is clamped.
   E: Push the POWER LEAD and the ATA LEAD between the middle connector and the outer connector into the space between the PCB and the HDD.



7. *Attach the top cover of the HDD tray.*
   - **To attach the top cover, put the hooks of the top cover in the openings of the HDD tray.**
   - **Use the 2 screws that were removed in step 1.**
   - **Make sure that the lead is not caught in the top cover.**

ⓘ Be sure to carry out HDD SELF TEST after attaching the HDD. (See the next page.)

■ HDD SELF TEST

Before using the HDD attached to this unit, test the HDD whether to be used correctly. There are 3 types of the test method and choose one in the <HDD SELF TEST> screen. When choosing, refer to the table below which describes the details of each method.

ⓘ When the HDD is newly attached for recording, it is recommended to execute “READ/WRITE TEST” and format all the area of the HDD before it is used for recording. Be sure that all the data in the HDD will be erased when executing “READ/WRITE TEST.”

Test mode	Time needed	Contents of the test	Effect of the test
QUICK TEST	approx.1 minute	The reading and writing test executed in the part of the HDD. The recorded contents will not be affected by this test.	Tests the compatibility beween the HDD and the recorder.
READ TEST	more than 1 hour (for 240 GB)	The reading test executed in all the sectors in the HDD. The recorded contents will not be affected by this test.	In addition to the compatiblity test, criticizes the partial sector defects in reading the data.
READ/WRITE TEST	more than 10 hours (for 240 GB)	The reading and writing test executed in all the sectors in the HDD. All the recorded contents will be erased. The HDD will be formatted to record or playback the data stably.	In addition to the compatibility test, criticizes the partial sector defects in reading or writing. Also uses for the screening effect by ageing or for erasing all the data when dumping the HDD.

ⓘ The recorded contents will not be affected when executing “QUICK TEST” or “READ TEST.” When executing “READ/WRITE TEST,” be sure that all the recorded contents of both HDD (A and B) will be erased. When you execute “READ/WRITE TEST,” attach one HDD to be tested and remove the other HDD with the contents you do not want to erase.

ⓘ This function temporarily tests the HDD whether it will be used correctly, and does not completely criticize the defect involved in the HDD.

1. Attach the HDD to the unit, and connect the cameras, the monitors, and the wired remote control (☞ see pages 12 to 17).

2. Turn on the MAIN switch on the rear panel and wait until the ACCESS indicator is turned off.

3. Make sure that the POWER button on the front panel is turned off. Press the WARNING RESET button for more than 3 seconds until <HDD SELF TEST> screen appears.

```
<HDD SELF TEST>
››QUICK TEST
 READ TEST
 READ/WRITE TEST




ENTER:EXECUTE,CLEAR:BACK
```

4. Press the JOG ▲,▼ buttons to move the cursor to the desired setting and then press the ENTER button.

- **There are 3 types of the test method. Refer to the table on the previous page for choosing the desired method.**
- **The power turns off when pressing the CLEAR button.**
- **The test screen of the selected method appears.**

(When selecting "QUICK TEST"• • •)

```
<QUICK TEST>

››EXECUTE




ALL DATA WILL NOT BE ERASED
ESTIMATED TIME ABOUT 1 MIN.
ENTER:EXECUTE,CLEAR:BACK
```

(When selecting "READ TEST"• • •)

```
<READ TEST>

››EXECUTE




ESTIMATED TIME MORE THAN 1H
ENTER:EXECUTE,CLEAR:BACK
```

(When selecting "READ/WRITE TEST"• • •)

```
<READ/WRITE TEST>

››EXECUTE




ALL DATA WILL BE ERASED
ESTIMATED TIME MORE THAN 10H
ENTER:EXECUTE,CLEAR:BACK
```

5. Press the ENTER button to execute the test.

- **The test is executed and the status screen appears.**
- **When you attach the 2 HDDs, test for the HDD of drive A is executed first, and then test for the HDD of drive B is executed.**
- **When testing the 2 HDDs, the percentage displayed on the screen indicates the total value of the 2 HDDs.**
- **When the problem is found during testing the drive A, the test of drive A finishes and the testing of the drive B starts. In this case, the value of the percentage is skipped.**

```
<HDD SELF TEST>


            20%


DO NOT POWER OFF DURING TEST
CLEAR:CANCEL
```

6. When the test is completed, the test result screen appears.

```
<HDD SELF TEST>




A:NO PROBLEM FOUND
B:NO PROBLEM FOUND

CLEAR:BACK
```

- **When the problem is found, "PROBLEM FOUND" is displayed. When there is no HDD in the drive, "NO DRIVE CONNECTED" is displayed.**
  "A": indicates MASTER HDD
  "B": indicates SLAVE HDD

7. Press the CLEAR button twice.

- **When pressing the button once, the screen returns to <HDD SELF TEST> screen which appears in step 3. When pressing the button again, the power turns off.**

8. (When the problem is not found • • •)
Press the POWER button to turn the power on, and then set the unit to start operating.
(When the problem is found • • •)
Replace the HDD and execute the test again.

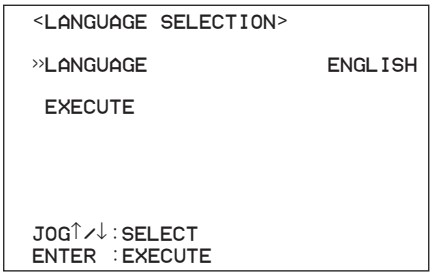
■ AUTO SET UP

AUTO SET UP is displayed, in order to set up an indispensable function, when this unit is turned on for the first time.

➲ Only when the unit is turned on for the first time, the AUTO SET UP screen is displayed automatically. It is not displayed automatically next time.

1. Turn on the MAIN switch on the rear panel and wait until the ACCESS indicator is turned off, then press the POWER button on the front panel.

- **The <LANGUAGE SELECTION> screen is displayed.**
- **This menu is used to select the language of the menu.**



Setting of LANGUAGE (default: “ENGLISH”)
“ENGLISH,” “FRANCAIS,” “DEUTSCH,” “ESPAÑOL,” “РУССКИЙ,” “ITALIANO”

2. Press the ENTER button.

- **The background of the setting item turns red and flashes.**

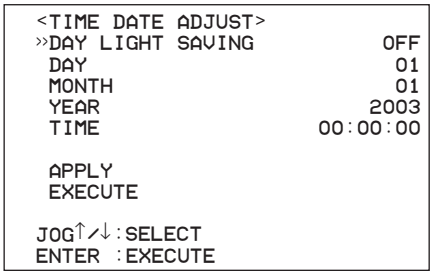
3. Press the JOG ▲,▼ buttons to display the desired setting and then press the ENTER button.

- **The setting item is determined and flashing stops.**

➲ Beware that the menu screen cannot be exited while setting the AUTO SET UP. Furthermore, the screen which has already set cannot be displayed again.

4. Press the JOG ▲,▼ buttons to move the cursor to “EXECUTE” and then press the ENTER button.

- **The <TIME DATE ADJUST> screen appears.**
- **This menu is used to set the date and time.**

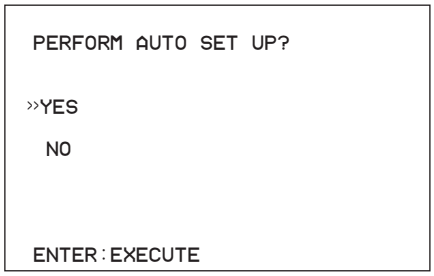


5. Set the desired setting in this screen. See ♦ DAY LIGHT SAVING (☞ page 23), ♦ TIME DATE ADJUST (☞ page 24) for the details.

➲ To start the clock running, press the JOG ▲,▼ buttons to move the cursor to “APPLY” and then press the ENTER button.

6. Press the JOG ▲,▼ buttons to move the cursor to “EXECUTE” and then press the ENTER button.

- **“PERFORM AUTO SET UP?” is displayed on the screen.**

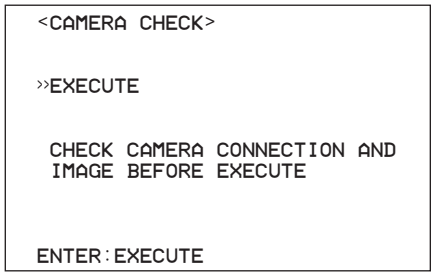


7-1. (When cancelling AUTO SET UP • • •)
Select “NO” by pressing the JOG ▲,▼ buttons and then press the ENTER button.

- **“SETTING UP...” is displayed on the screen, and the unit boots-up.**

7-2. (When executing AUTO SET UP • • •)
Select “YES” by pressing the JOG ▲,▼ buttons and then press the ENTER button.

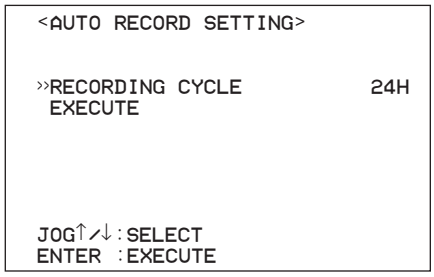
- **The <CAMERA CHECK> screen appears.**
- **This menu is used to determine the connected cameras and the video condition.**



➲ To execute AUTO SET UP again, while pressing the WARNING RESET button, press the POWER button on the front panel while the MAIN switch is set to ON and the POWER button is set to OFF. All the menus of record settings will be reset.

8. Press the ENTER button.

- **The <AUTO RECORD SETTING> screen appears.**
- **This menu is used to set the recording period.**



Setting of RECORDING CYCLE (default: “24H”)
“24H,” “48H,” “72H,” “96H,” “120H,” “144H,” “1WEEK,” “2WEEK,” “3WEEK,” “1MONTH,” “2MONTH,” “3MONTH,” “4MONTH,” “5MONTH,” “6MONTH,” “1YEAR”

9. Press the ENTER button.
- **The background of the setting item turns red and flashes.**

10. Press the JOG ▲,▼ buttons to display the desired setting and then press the ENTER button.
- **The setting item is determined and flashing stops.**

11. Press the JOG ▲,▼ buttons to move the cursor to "EXECUTE" and then press the ENTER button.
- **The <RECORD SETTING> screen appears.**
- **This menu is used to set the recording interval and recording picture quality of normal recording and alarm recording corresponding to each camera numbers.**

```
  <RECORD SETTING>
NO   PPS     GRADE A-PPS   A-GRADE
»①  12.5P   SUPER 12.5P   SUPER
 ②  ------ SUPER ------ SUPER
 ③  ------ SUPER ------ SUPER
 ④  12.5P   SUPER 12.5P   SUPER

  ALARM TYPE             ALARM CH


<ESTD REC>       1D11H55M
 PRESS POWER BUTTON TO EXIT
```

➲ Depending on the number of connected cameras and the value of "RECORDING CYCLE," the most suitable setting of the "PPS," "A-PPS," "GRADE" and "A-GRADE" are set automatically.

12. When the setting is completed, press the POWER button.
- **"SETTING UP..." is displayed on the screen, and the unit boots-up.**

■ INITIALIZATION

This menu is used to set HDD SETTING and to initialize the HDD.

♦ HDD SETTING

The HDD SETTING can be set to NORMAL, MIRRORING (simultaneous recording of the 2 HDDs), or PARTITION (an independent partition for alarm recording is set within the total HDD memory). (☞ see pages 69 and 70 for "MIRRORING" and "PARTITION")

```
<INITIALIZATION>
»HDD SETTING              NORMAL

 BOOT UP DELAY              30S

 POWER OFF
 INITIALIZATION



ALL DATA WILL BE ERASED
WHEN PROCEED INITIALIZATION
```

♦ BOOT UP DELAY

The unit accesses the attached HDD when the power is turned on. Depending on the HDD attached, it may take a long time to be accessed. You do not have to change the setting when this unit recognizes the attached HDD while the BOOT UP DELAY is set to the default setting.

Setting of BOOT UP DELAY (default: "30S")
"10S," "11S," • • • • • "30S," • • • • • "58S," "59S"

ⓘ Set "BOOT UP DELAY" with enough time to accomodate the recognition time of attached HDD.

ⓘ When setting timer recording in the <TIMER PROGRAM SETTINGS> screen and setting the "BOOT UP DELAY" with 30 seconds or more, the recording start time delays for the amount of time exceeds 30 seconds in the set-up time of "BOOT UP DELAY."

1. Turn on the MAIN switch on the rear panel and wait until the ACCESS indicator turns off. Make sure that the POWER button on the front panel is turned off. While pressing the JOG ▶ button, press the POWER button on the front panel.
- **The <INITIALIZATION> screen appears.**
- **POWER button operation is not accepted while the ACCESS indicator is flashing. Press the POWER button after the indicator turns off.**

2. Press the JOG ▲,▼ buttons to move the cursor to "BOOT UP DELAY" and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

ⓘ When you do not change the setting, select "POWER OFF."

3. Press the JOG ▲,▼ buttons to display the desired setting and then press the ENTER button.
- **The setting item is determined and flashing stops.**

4. Press the JOG ▲,▼ buttons to select "POWER OFF" and then press the ENTER button.
- **The unit turns off.**

5. Press the POWER button on the front panel.
- **When the amount of time set for BOOT UP DELAY is passed, the unit starts accessing the attached HDD.**
- **Confirm that the attached HDD is recognized correctly.**

♦ HDD RECONSTRUCTION

This unit automatically detects the HDD connected to the unit when the POWER button on the front panel is pressed to turn on the unit. When the HDD is connected, added, or deleted, excecute the HDD reconstruction.

```
<HDD RECONSTRUCTION>

A: HDD(120GB)
B: HDD(120GB)









»POWER OFF
 RECONSTRUCTION
```

1. Press the POWER button on the front panel.
- **"SETTING UP..." is displayed on the screen, and the unit boots-up. When the unit detects the change of the HDD, <HDD RECONSTRUCTION> screen is displayed.**

2. Press the JOG ▲,▼ buttons to move the cursor to "RECONSTRUCTION" and then press the ENTER button.
- **"SETTING UP..." is displayed on the screen, and the unit boots-up again.**

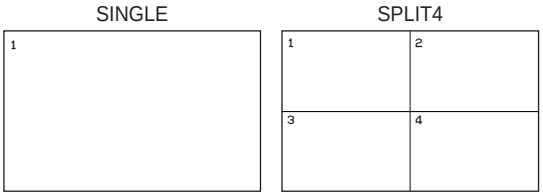
ⓘ To exit <HDD RECONSTRUCTION> screen without reconstructing the HDD, select "POWER OFF."

■ Multiplexer functions

SPLIT/SINGLE, ZOOM, +, – and JOG buttons are used to perform some of the multiplexer functions.

♦ Multiplexer operation

Each time you press the SPLIT/SINGLE button, the screen display is switched between the single screen display and the split/sequential screen display.



When the +, – button is pressed during single screen display, the camera number is switched.

When the +, – button is pressed during split/sequential screen display, the screen display is switched between the split screen display and the single sequential screen display. (Single sequential screen display is skipped during playback.)

♦ Zoom operation

When the ZOOM button is pressed during single screen display, magnification 100% screen appears and the magnification centre point (X) is displayed at the centre of the screen. Pressing the button again switches the magnification to 200% and then 400%.
The centre point moves vertically or horizontally by pressing the JOG buttons (☞ see "ZOOM and JOG buttons" on page 36).

■ Menu settings

Menu screens are used to set the operational conditions of this unit. Although the setting method differs slightly depending on the menu screen, the basic setting method of using the JOG, ENTER, and CLEAR buttons is described in the example below.

Example: Setting "DISPLAY MODE" to "3." (default: "1")

1. Set the MAIN switch on the rear panel to ON. Press the POWER button on the front panel after the ACCESS indicator turns off.

- **"SETTING UP..." appears on the screen and the unit boots-up.**
- **POWER button operation is not accepted while the ACCESS indicator is flashing. Press the POWER button after the indicator turns off.**

2. After boot-up, press the SET UP button.

- **The <SETTINGS> screen appears.**

```
<SETTINGS>
»TIME DATE/DISPLAY SETTINGS
 MPX DISPLAY SETTINGS
 MOTION DETECTION SETTINGS
 RECORD SETTINGS
 TIMER PROGRAM SETTINGS
 INITIAL SET UP/INFORMATION



 MEMO:
```

➲ When the SET UP button is pressed and the menu screen appears, the background darkens and the displayed characters become easier to see.

3. Check that the cursor (>>) is positioned at "TIME DATE/DISPLAY SETTINGS" and then press the ENTER button.

- **The <TIME DATE/DISPLAY SETTINGS> screen appears (☞ see page 34).**

```
<TIME DATE/DISPLAY SETTINGS>
»TIME DATE ADJUST
 DISPLAY MODE                1
 CLOCK LOCATION SETTING
 CAMERA DISPLAY          NUMBER
 CAMERA TITLE/MEMO SETTING
 DUPLEX MODE DISPLAY     BOTTOM

<MODE 1>

01-01-2003 00:00:00
```

4. Press the JOG ▲,▼ buttons to move the cursor to "DISPLAY MODE" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

5. Press the JOG ▲,▼ buttons to display "3."

- **The display mode sample on the bottom of the screen changes to <MODE 3>.**

6. Press the ENTER button.
- **The setting item is determined and flashing stops.**
- **To continue with other settings, repeat steps 4 to 6.**

```
<TIME DATE/DISPLAY SETTINGS>
 TIME DATE ADJUST
»DISPLAY MODE                3
 CLOCK LOCATION SETTING
 CAMERA DISPLAY          NUMBER
 CAMERA TITLE/MEMO SETTING
 DUPLEX MODE DISPLAY     BOTTOM

<MODE 3>

01-01-2003 WED
00:00:00 12.5P  99% A00001
```

➲ When pressing the CLEAR button while the setting item is flashing, the setting item returns to the previous setting.

♦ To return to a normal screen from a menu screen

The procedure to return to a normal screen after completing menu screen settings is described below.

1. Check that the setting item is no longer flashing and the item has been changed to the desired setting.
- **The setting has not been determined if the item is flashing. Refer to the above setting procedure to determine the setting.**
- **To continue with other settings or to check the setting item, <u>you can return to the previous screen by pressing the CLEAR button.</u>**

2-1. (To return to the normal screen by moving back menu screens one at a time • • •)
- **Press the CLEAR button as many times as the number of menu screens being displayed. The previous menu screen is displayed each time the CLEAR button is pressed.**

2-2. (To directly return to the normal screen • • •)
- **Press the SET UP button to clear the menu screen and return to the normal screen.**

ⓘ The menu screen is not cleared even when pressing the SET UP button while the setting item is flashing.

♦ DAYLIGHT SAVING/DAYLIGHT SETTING

Auto daylight saving function is used to set the time period to move the clock an hour. To activate this function, set the desired time period in “DAYLIGHT SETTING” and then set “DAYLIGHT SAVING” to “AUTO.”

In the “DAYLIGHT SETTING,” start/end time of the “DAYLIGHT SAVING” function can be checked and changed.

1. Press the SET UP button to display the <SETTINGS> screen.

2. Check that the cursor (>>) is positioned at “TIME DATE/DISPLAY SETTINGS” and then press the ENTER button.
- **The <TIME DATE/DISPLAY SETTINGS> screen appears.**

3. Check that the cursor is positioned at “TIME DATE ADJUST” and then press the ENTER button.
- **The <TIME DATE ADJUST> screen appears.**

```
<TIME DATE ADJUST>
»DAYLIGHT SAVING             OFF
 DAY                          01
 MONTH                        01
 YEAR                       2003
 TIME                   00:00:00
 DAYLIGHT SETTING
     DAY OF WEEK MONTH TIME
 IN  SUN    LAST  MAR  01:00
 OUT SUN    LAST  OCT  02:00
JOG↑/↓:SELECT
ENTER :EXECUTE
```

4. Check that “DAYLIGHT SAVING” is set to OFF.

5. Press the JOG ▲,▼ buttons to move the cursor (>>) to “IN” and then press the ENTER button twice.
- **The setting item of “DAY” is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

6. Press the JOG ▲,▼ buttons to display the desired setting and then press the ENTER button.
- **The setting item is determined and flashing stops.**

7. Press the JOG ▼ button to move the highlighted display to “WEEK” and then press the ENTER button.

8. Repeat steps 6 and 7 to set “WEEK,” “MONTH,” and “TIME.”

9. Press the CLEAR button.
- **The cursor reappears.**

10. Press the JOG ▲,▼ buttons to move the cursor to “DAYLIGHT SAVING” and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

11. Press the JOG ▲,▼ buttons to display “AUTO” and press the ENTER button.
- **The setting item is determined and flashing stops.**
- **Confirm the setting of the present time.**

12. Press the CLEAR button or the SET UP button.

♦ TIME DATE ADJUST

ⓘ Before you start recording, it is necessary to set accurately the present date and time.

Example: Setting the date/time to 10/28/2003 6:30pm (18:30). (default: "01/01/2003 00:00:00")

1. Press the SET UP button to display the <SETTINGS> screen.

2. Check that the cursor (>>) is positioned at "TIME DATE/ DISPLAY SETTINGS" and then press the ENTER button.

- **The <TIME DATE/DISPLAY SETTINGS> screen appears.**

3. Check that the cursor is positioned at "TIME DATE ADJUST" and then press the ENTER button.

- **The <TIME DATE ADJUST> screen appears.**

```
<TIME DATE ADJUST>
»DAYLIGHT SAVING          OFF
 DAY                       01
 MONTH                     01
 YEAR                    2003
 TIME                 00:00:00
```

4. Press the JOG ▲,▼ buttons to move the cursor to "DAY" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

```
<TIME DATE ADJUST>
 DAYLIGHT SAVING          OFF
»DAY                      01
 MONTH                    01
 YEAR                    2003
 TIME                 00:00:00
```

5. Press the JOG ▲,▼ buttons to display "28" and then press the ENTER button.

- **The setting item is determined and flashing stops.**

```
<TIME DATE ADJUST>
 DAYLIGHT SAVING          OFF
»DAY                      28
 MONTH                    01
 YEAR                    2003
 TIME                 00:00:00
```

6. Repeat steps 4 and 5 to set "MONTH" and "YEAR."

7. Press the JOG ▲,▼ buttons to move the cursor to "TIME" and then press the ENTER button twice.

- **The setting item of hour digit is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

```
<TIME DATE ADJUST>
 DAYLIGHT SAVING          OFF
 DAY                       28
 MONTH                     10
 YEAR                    2003
 TIME                 00:00:00
```

8. Press the JOG ▲,▼ buttons to display "18" and then press the ENTER button.

- **The setting item is determined and flashing stops.**

```
<TIME DATE ADJUST>
 DAYLIGHT SAVING          OFF
 DAY                       28
 MONTH                     10
 YEAR                    2003
 TIME                 18:00:00
```

➲ The time is indicated using the 24-hour system.

9. Press the JOG ▼ button to move the highlighted display to "MINUTE" and press the ENTER button. And then repeat step 8.

10. Repeat step 9 for "SECOND."

11. Press the ENTER button.

- **The setting item is determined and flashing stops.**

```
<TIME DATE ADJUST>
 DAYLIGHT SAVING          OFF
 DAY                       28
 MONTH                     10
 YEAR                    2003
 TIME                 18:30:00
```

12. Press the CLEAR button or the SET UP button.

♦ Present time display

When turning on the power of the unit, the time/date display shown below appears (in case of DISPLAY MODE 3).

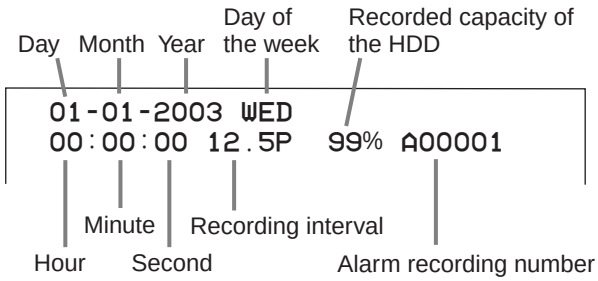
➲ For setting other display modes, ☞ see "DISPLAY MODE" on page 34.

➲ During recording, the recorded capacity of HDD is displayed. When recording is stopped, the display is cleared (with the exception of when pausing recording). The recorded capacity of HDD appears again after a few moments when recording is started again.

INFORMATION

This unit uses 4 digits to display the year. The available display range is 99 years between 1/1/2001 to 31/12/2099. The unit is also equipped with a function to automatically calculate leap years. The date returns to the year 2001 after 31/12/2099.

♦ Recorded capacity display function



When "REMAIN HDD" of the <REAR TERMINAL SETTINGS> screen is set to "MAIN" or "SUB," the recorded capacity of the specified HDD is displayed on the screen. The "%" indicates the ratio of the recorded capacity to the total HDD capacity. The following settings are required to enable this function.

1) Select HDD and set the remaining capacity in the "REMAIN HDD" of the <REAR TERMINAL SETTINGS> screen. (☞ see page 50).

2) Set "DISPLAY MODE" in the <TIME DATE/DISPLAY SETTINGS> screen to "3." (☞ see page 34).

■ Basic manual recording

Normal recording using manual operation is described below. Before you start recording, check the settings of "HDD REPEAT REC MAIN" and "HDD REPEAT REC SUB" in the <HDD SETTINGS> screen (☞ see page 47), and then set the recording settings.

ⓘ Settings here are for normal recording only. For timer recording, settings must be made on the <TIMER PROGRAM SETTINGS> screen (☞ see page 44).

♦ Setting the recording interval and recording picture quality for normal recording

To perform normal recording, "PPS" and "GRADE" must be set for each camera.

PPS \ Number of operational cameras	# 1	# 2	# 3	# 4
SHORT	25P	12.5P	8.33P	6.25P
	12.5P	6.25P	4.165P	3.125P
	8.333P	4.167P	2.777P	2.083P
	6.25P	3.125P	2.083P	1.563P
	5P	2.5P	1.666P	1.25P
Recording interval	4.167P	2.083P	1.388P	1.042P
	3.125P	1.563P	1.041P	0.781P
	2.5P	1.25P	0.833P	0.625P
	1P	0.5P	0.333P	0.25P
LONG	0.5P	0.25P	0.167P	0.125P
	0.25P	0.125P	0.083P	0.063P
	0.125P	0.063P	0.042P	0.031P

Setting of "PPS" (default: "3.125P")
"6.25P," "3.125P," "2.083P," "1.563P," "1.25P," "1.042P," "0.781P," "0.625P," "0.25P," "0.125P," "0.063P," "0.031P," "- - - - -"

"- - - - -": Recording is not performed with camera set to this item.

ⓘ Available recording intervals vary depending on the number of cameras operating or ALARM RECORDING settings (☞ see page 41). See the chart above for the displaying interval.

Setting of "GRADE" (default: "STD")
"SUPER," "HIGH," "STD"(STANDARD), "BASIC," "LONG"

Example: Setting "PPS" of camera number "①" to "1.25P" and "GRADE" to "HIGH" for normal recording.

1. Press the SET UP button to display the <SETTINGS> screen.

2. Press the JOG ▲,▼ buttons to move the cursor to "RECORD SETTINGS" and then press the ENTER button.

- **The <RECORD SETTINGS> screen appears.**

```
 <RECORD SETTINGS>
»ALARM SETTING
 RECORD SETTING
 ALARM REC DURATION          5S
```

3. Press the JOG ▲,▼ buttons to move the cursor to "RECORD SETTING" and then press the ENTER button.

- **The <RECORD SETTING> screen appears.**

```
 <RECORD SETTING>
NO  PPS     GRADE A-PPS   A-GRADE
»①  3.125P STD   3.125P STD
 ②  3.125P STD   3.125P STD
 ③  3.125P STD   3.125P STD
 ④  3.125P STD   3.125P STD

 ALARM TYPE              ALARM CH
 PRE ALARM REC                OFF

                        CLEAR:BACK
<ESTD REC>      □□D□□H□□M
```

CAUTION: For <ESTD REC>,
☞ see "Continuous recording time table" on page 77.

About <ESTD REC>

- **The remaining recordable time is displayed as <ESTD REC> depending on the "PPS" and "GRADE" settings. (This time is not change when changing the alarm recording settings.) For the details concerning the estimated recordable time, ☞ see page 77.**

4. Check that the cursor is positioned at "①" and then press the ENTER button.

- **The setting item of "PPS" is highlighted.**

```
 <RECORD SETTING>
NO  PPS     GRADE A-PPS   A-GRADE
 ①  3.125P STD   3.125P STD
 ②  3.125P STD   3.125P STD
 ③  3.125P STD   3.125P STD
 ④  3.125P STD   3.125P STD
```

5. Press the ENTER button again.

- **The background of the setting item turns red and flashes.**

```
 <RECORD SETTING>
NO  PPS     GRADE A-PPS   A-GRADE
 ①  3.125P STD   3.125P STD
 ②  3.125P STD   3.125P STD
 ③  3.125P STD   3.125P STD
 ④  3.125P STD   3.125P STD
```

ⓘ The menu screen is not cleared even when pressing the SET UP button while the setting item is flashing.

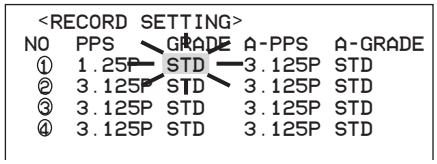
6. Press the JOG ▲,▼ buttons to select "1.25P" and then press the ENTER button.

- **Setting item is determined and flashing stops.**

```
 <RECORD SETTING>
NO  PPS     GRADE A-PPS   A-GRADE
 ①  1.25P  STD   3.125P STD
 ②  3.125P STD   3.125P STD
 ③  3.125P STD   3.125P STD
 ④  3.125P STD   3.125P STD
```

7. Press the JOG ▼ button to highlight the setting item of "GRADE" and then press the ENTER button.

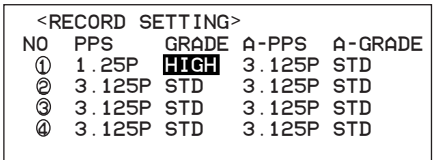
- **The background of the setting item turns red and flashes.**



ⓘ The menu screen is not cleared even when pressing the SET UP button while the setting item is flashing.

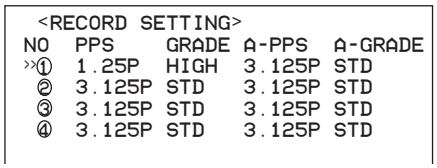
8. Press the JOG ▲,▼ buttons to select "HIGH" and then press the ENTER button.

- **The setting item is determined and flashing stops.**



9. When the setting is completed, press the CLEAR button.

- **The cursor reappears to the left of the camera number.**
- **To continue with other camera number settings, press the JOG ▲,▼ buttons to move the cursor to the desired camera number and repeat steps 4 to 9.**



10. Press the CLEAR button or the SET UP button to return to the normal screen.

11. Press both REC/STOP buttons.

- **The REC indicator lights up and recording starts.**

12. To stop recording, press both REC/STOP buttons.

- **Recording stops and the REC indicator turns off.**

■ Basic playback

This unit allows recorded video to be played back using various methods. The basic playback described below is the most common method for playback.

1. Press the PLAY button.

- **Recorded data of the HDD is played back.**
- **When you start playback after turning the power on, the oldest recorded video is played back first. Otherwise, playback resumes from the stopped position of the previous playback.**

ⓘ When "HDD REPEAT PLAY" in the <HDD SETTINGS> screen is set to "OFF," playback stops when reaching the physical end of the HDD or the end of the recorded section. When "HDD REPEAT PLAY" is set to "ON," recorded video is played back repeatedly (☞ see "HDD REPEAT PLAY" on page 47).

(To change the playback device • • •)

- **The default setting of the playback device is MAIN HDD.**
- **To change the playback device to SUB HDD, display the <SEARCH SELECTION> screen and select "SUB" in "PLAYBACK DEVICE." (☞ see page 63)**

2. To pause playback, press the PAUSE button.

- **To resume playback, press the PAUSE button again or press the PLAY button.**

3. To stop playback, press the STOP button.

- **When you start playback again, the playback starts from the stopped position.**

■ Basic search

This unit displays a menu of most frequently used search function simply by pressing the SEARCH button.

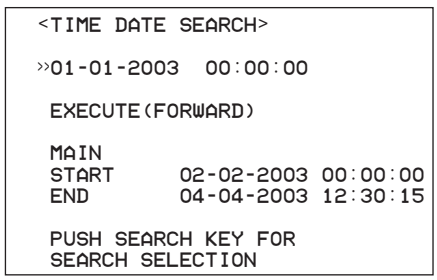
♦ TIME DATE SEARCH

Various search functions are available for searching the start point of video clips. This function allows you to search the video by specifying date, hour, minute, second, and the camera number.

Example: Searching a scene recorded on the MAIN HDD with time/date stamp of 03/03/2003 9:25:40pm (21:25:40) using camera number "③."

1. Press the SEARCH button to display the <TIME DATE SEARCH> screen.

- **The default setting of the search menu displayed when pressing the SEARCH button is "TIME DATE SEARCH."**



2. Check that the cursor is next to the date to be searched and then press the ENTER button twice.

- **The setting item is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

3. Press the JOG ▲,▼ buttons to display "03" for "DAY" and then press the ENTER button.

- **Setting item is determined and flashing stops.**

4. Press the JOG ▼ button to highlight "MONTH" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

5. Press the JOG ▲,▼ buttons to display "03" for "MONTH" and then press the ENTER button.

- **Setting item is determined and flashing stops.**

6. Repeat steps 4 and 5 to set "YEAR," "HOUR," "MINUTE," and "SECOND."

```
<TIME DATE SEARCH>

 03-03-2003  21:25:40

 EXECUTE(FORWARD)

 MAIN
 START      02-02-2003 00:00:00
 END        04-04-2003 12:30:15

 PUSH SEARCH KEY FOR
 SEARCH SELECTION
```

➲ To exit the <TIME DATE SEARCH> screen without searching, press the CLEAR button or press the SEARCH button twice.

➲ For selecting search functions, ☞ see <SEARCH SELECTION> on page 63.

7. Press the SEARCH button to display the <SEARCH SELECTION> screen.

```
<SEARCH SELECTION>
 SEARCH TYPE          TIME DATE
»SELECTION CAMERA NUMBER   ALL

 PLAYBACK DEVICE           MAIN

 MAIN


 START      02-02-2003 00:00:00
 END        04-04-2003 12:30:15
```

8. Check that the cursor is positioned at "SELECTION CAMERA NUMBER" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

Setting (default: "ALL")

"ALL," "①," "②," "③," "④"

"ALL": Searches for all the camera numbers, "①" through "④," and displays search results in SPLIT4 screen.

9. Press the JOG ▲,▼ buttons to select "③" and then press the ENTER button.

- **Setting item is determined and flashing stops.**

10-1. (To change the playback device • • •)
Press the JOG ▲,▼ buttons to select "PLAYBACK DEVICE" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

Setting (default: "MAIN")

"MAIN": Select when playing back MAIN HDD contents.

"SUB": Select when playing back SUB HDD contents.

ⓘ "SUB" appears when "HDD SETTING" in the <INITIALIZATION> is set to "PARTITION."

10-2. Press the JOG ▲,▼ buttons to display the desired playback device and then press the ENTER button.

11-1. (To change the search type • • •)
Press the JOG ▲,▼ buttons to select "SEARCH TYPE" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

Setting (default: "TIME DATE")

"TIME DATE," "INDEX," "ALARM INDEX," "ALARM SKIP," "ALARM LIST"

11-2. Press the JOG ▲,▼ buttons to display the desired search type and then press the ENTER button.

```
<SEARCH SELECTION>
»SEARCH TYPE          TIME DATE
 SELECTION CAMERA NUMBER     ③

 PLAYBACK DEVICE           MAIN

 MAIN
```

12. When the setting is completed, press the CLEAR button.

- **The display returns to the <TIME DATE SEARCH> screen and the cursor reappears on the left of the date to be searched.**

13. Press the JOG ▲,▼ buttons to select "EXECUTE (FORWARD)" and then press the ENTER button.

- **When the TIME DATE SEARCH is executed, the video of the set date/time (or the video closest to the searched date/time) appears in still frame.**
- **The search result appears in the SPLIT4 screen display when "ALL" is selected in "SELECTION CAMERA NUMBER" of the <SEARCH SELECTION> screen. When an individual camera number is selected, the still frame is displayed in the single screen display.**

```
<TIME DATE SEARCH>

 03-03-2003  21:25:40

»EXECUTE(FORWARD)

 MAIN
 START      02-02-2003 00:00:00
 END        04-04-2003 12:30:15

 PUSH SEARCH KEY FOR
 SEARCH SELECTION
```

➲ When there is no recording of the set time, the video of the closest time and date of the set camera number displays in still frame.

➲ Depending on the recording condition, TIME DATE SEARCH may not operate correctly.

ⓘ To display a single screen display of the selected camera number from the SPLIT4 screen display of the search result when "ALL" is selected in the "SELECTION CAMERA NUMBER" setting, press the SPLIT/SINGLE button to switch the display to the single screen display and then press + or – button to select the desired camera number.

14. Press either the PLAY button or the PAUSE button to playback the searched image.

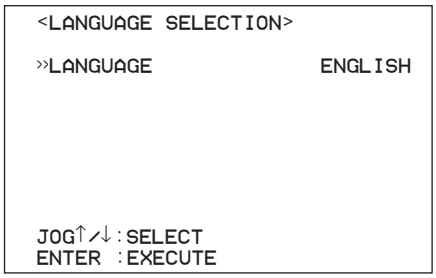
➲ For playback, ☞ see “Various playback functions” on page 62.

15. To stop playback/still frame playback, press the STOP button.

- **The display returns to the normal screen.**

■ LANGUAGE SELECTION

With this unit, the menu screen display can be selected from six languages. As “ENGLISH” is selected for the initial setting, follow the procedure below if you want to select a language other than “ENGLISH.”



Setting (default: “ENGLISH”)

“ENGLISH,” “FRANCAIS,” “DEUTSCH,” “ESPAÑOL,” “РУССКИЙ,” “ITALIANO”

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “LANGUAGE” in the <LANGUAGE SELECTION> screen. Display the desired setting and determine such setting.

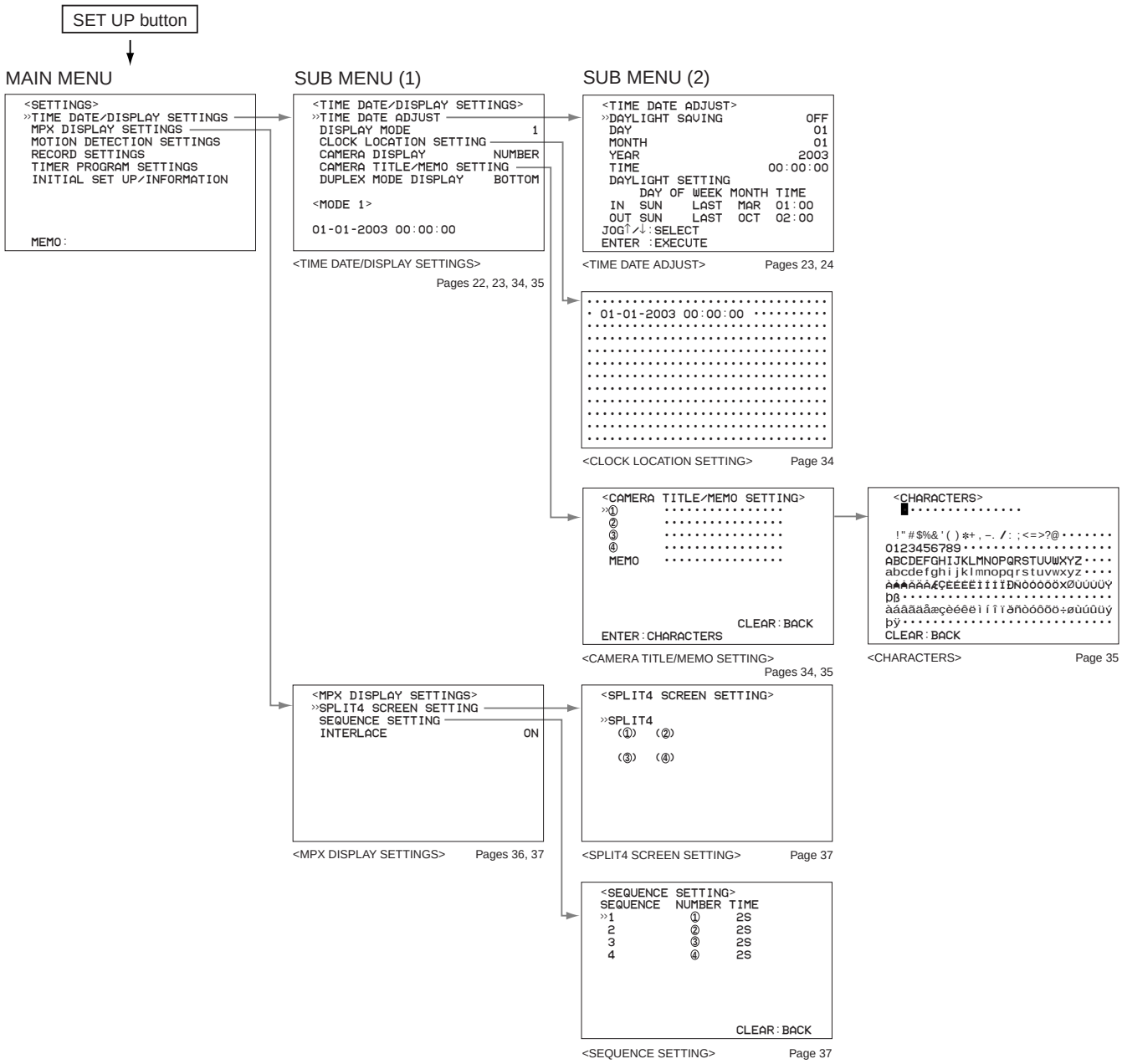
2. Press the CLEAR button or the SET UP button.

ⓘ When the user menu is added, “OTHER” is displayed in LANGUAGE. Select “OTHER” when the user menu is added.

■ MENU SETTING

You can set the basic settings for this unit in the menu setting. Refer to pages shown below for details.

➲ During playback, recording, and pre-alarm recording stand-by mode, you cannot change some of the menu settings.



SET UP button

MAIN MENU

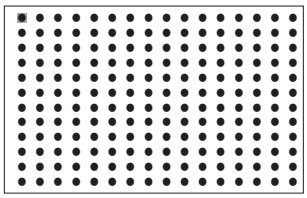
```
<SETTINGS>
»TIME DATE/DISPLAY SETTINGS
 MPX DISPLAY SETTINGS
 MOTION DETECTION SETTINGS
 RECORD SETTINGS
 TIMER PROGRAM SETTINGS
 INITIAL SET UP/INFORMATION


MEMO:
```

SUB MENU (1)

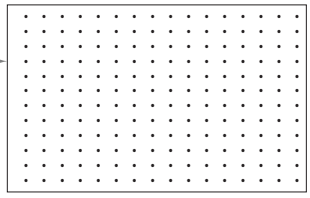
```
<MOTION DETECTION SETTINGS>
»SELECTION CAMERA NUMBER      ①
 DETECTION MASK SETTING
 SENSITIVITY          HIGH··<<<LOW
 MOTION THRESHOLD              5
 TEST MODE
 MD LOCK OUT TIME            OFF
```

<MOTION DETECTION SETTINGS> Pages 38 to 40

SUB MENU (2)



<DETECTION MASK SETTING> Page 38



<TEST MODE> Page 39

```
<RECORD SETTINGS>
»ALARM SETTING
 RECORD SETTING
 ALARM REC DURATION          5S
```

<RECORD SETTINGS> Pages 25, 26, 41 to 43

```
 <ALARM SETTING>
 ALARM  RECORD CAMERA    TRIGGER
»1      ①---              EXT
 2      -②--              EXT
 3      --③-              EXT
 4      ---④              EXT
 EMR    ①②③④

 ALARM TYPE             ALARM CH


                      CLEAR:BACK
```

<ALARM SETTINGS> Page 41

```
 <RECORD SETTING>
NO  PPS     GRADE A-PPS  A-GRADE
»①  3.125P STD   3.125P STD
 ②  3.125P STD   3.125P STD
 ③  3.125P STD   3.125P STD
 ④  3.125P STD   3.125P STD

 ALARM TYPE             ALARM CH
 PRE ALARM REC             OFF

                      CLEAR:BACK
<ESTD REC>      □□D□□H□□M   □□%
```

*1

<RECORD SETTING> Page 42

```
<TIMER PROGRAM SETTINGS>
»SELECTED PATTERN        P1-SET
 HOLIDAY SETTING
 REC MODE A
 REC MODE B
 REC MODE C
 REC MODE D
 ALARM REC DURATION          5S
```

<TIMER PROGRAM SETTINGS>

Pages 44 to 46

```
 <TIMER PROGRAM>                P1
    DW   START END   MODE   MD
»1 ---  --:-- --:-- ----    -
 2 ---  --:-- --:-- ----    -
 3 ---  --:-- --:-- ----    -
 4 ---  --:-- --:-- ----    -
 5 ---  --:-- --:-- ----    -
 6 ---  --:-- --:-- ----    -
 7 ---  --:-- --:-- ----    -
 8 ---  --:-- --:-- ----    -

 SPL   SAT-SUN
```

<TIMER PROGRAM> Page 44

```
 <HOLIDAY SETTING>
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--



DAY/MONTH
```

<HOLIDAY SETTING> Page 46

SUB MENU (3)

```
 <ALARM SETTING A>
 ALARM  RECORD CAMERA    TRIGGER
»1      ①---              EXT
 2      -②--              EXT
 3      --③-              EXT
 4      ---④              EXT
 EMR    ①②③④

 ALARM TYPE             ALARM CH


                      CLEAR:BACK
```

<ALARM SETTING A> to <ALARM SETTING D> Page 46

SUB MENU (2)

```
<REC MODE A>
»ALARM SETTING
 RECORD SETTING
```

<REC MODE A> to <REC MODE D> Page 46

```
 <RECORD SETTING A>
NO  PPS     GRADE A-PPS  A-GRADE
»①  3.125P STD   3.125P STD
 ②  3.125P STD   3.125P STD
 ③  3.125P STD   3.125P STD
 ④  3.125P STD   3.125P STD

 ALARM TYPE             ALARM CH
 PRE ALARM REC             OFF

                      CLEAR:BACK
<ESTD REC>      □□D□□H□□M   □□%
```

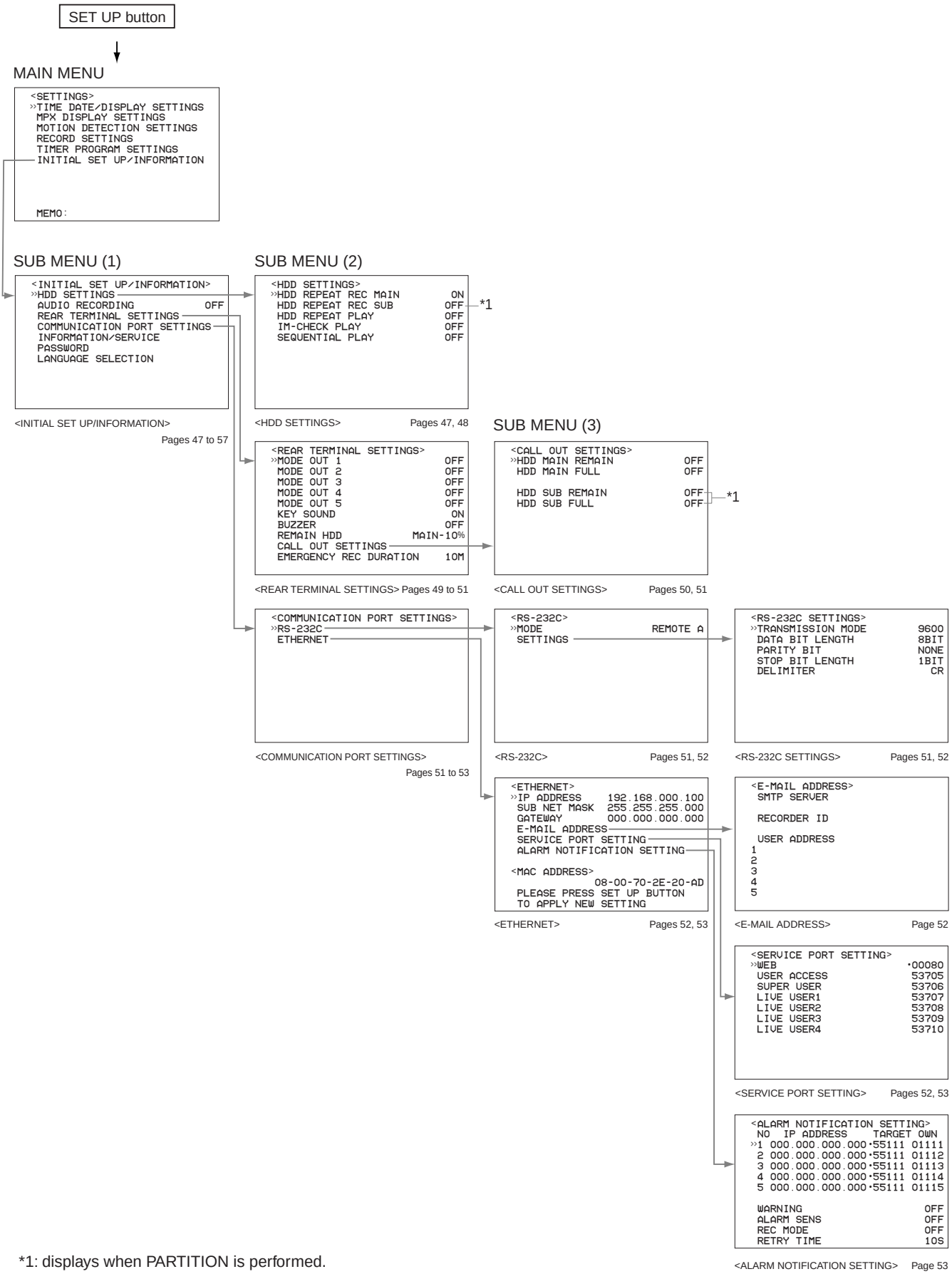
*1

<RECORD SETTING A> to <RECORD SETTING D> Page 46

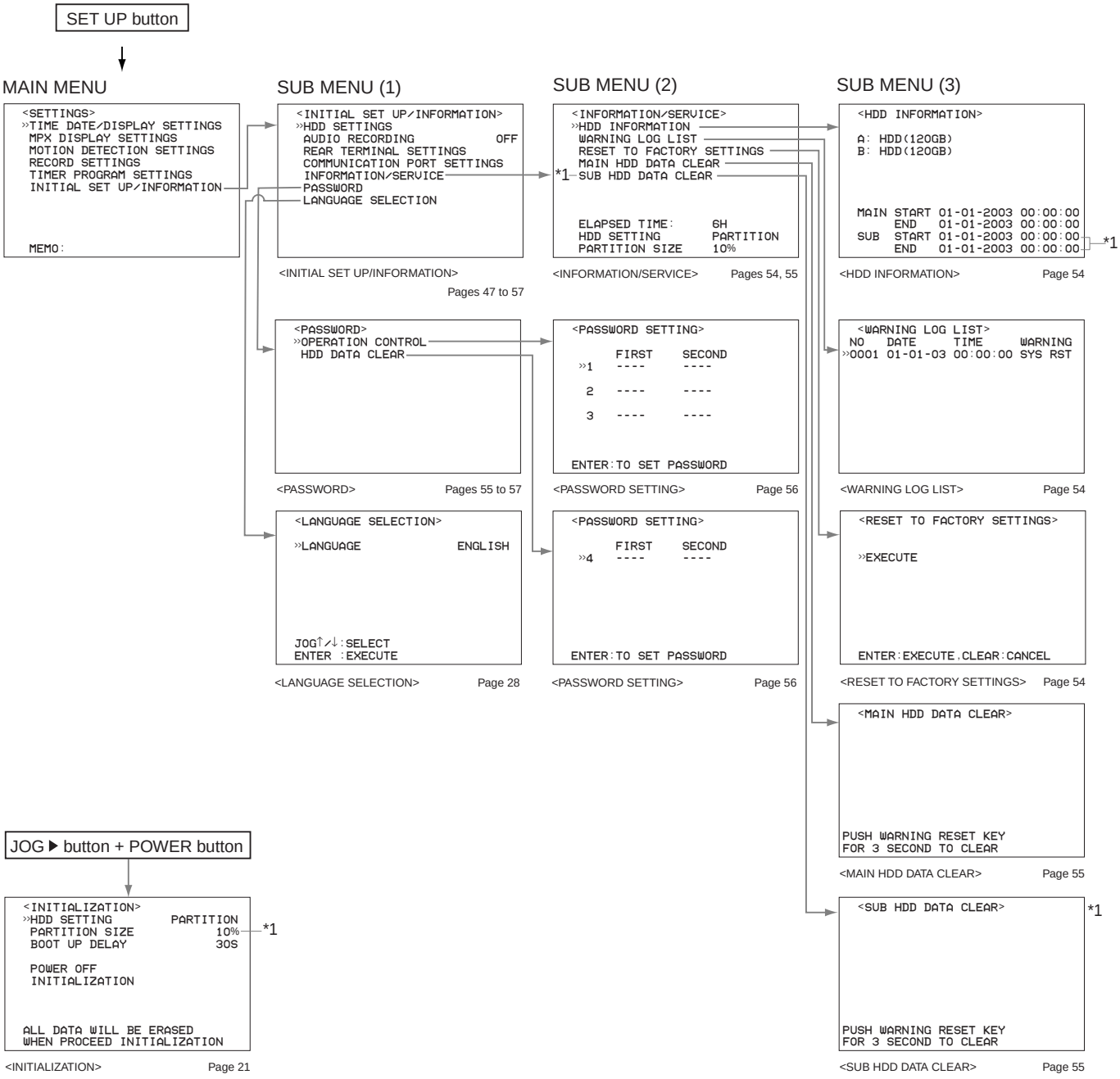
CAUTION: For <ESTD REC>,

☞ see “Continuous recording time table” on page 77.

*1: displays when PARTITION is performed.

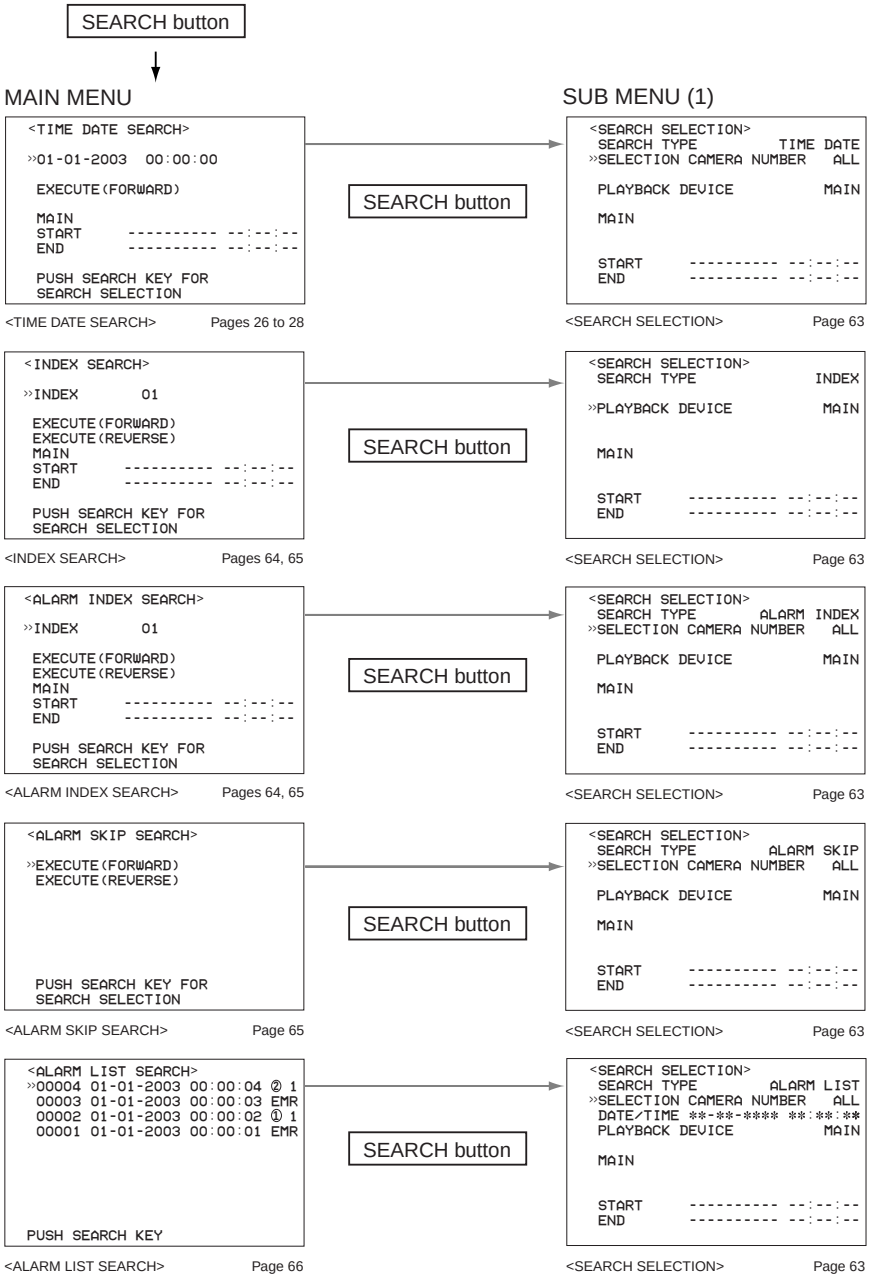


*1: displays when PARTITION is performed.



*1: displays when PARTITION is performed.

■ SEARCH SELECTION MENU



<TIME DATE/DISPLAY SETTINGS>

■ TIME DATE ADJUST

☞ See page 24.

■ DISPLAY MODE

This item is used to set the display format of the date and present time.

```
<TIME DATE/DISPLAY SETTINGS>
 TIME DATE ADJUST
»DISPLAY MODE                1
 CLOCK LOCATION SETTING
 CAMERA DISPLAY          NUMBER
 CAMERA TITLE/MEMO SETTING
 DUPLEX MODE DISPLAY     BOTTOM

<MODE 1>

01-01-2003 00:00:00
```

Setting (default: “1”)

“1”: Displays the date/month/year and present time.

“2”: Displays the date/month/year, day of the week, present time, and recording interval (during single screen playback only).

“3”: Displays the date/month/year, day of the week, present time, recording interval (during single screen playback only), recorded capacity of HDD (during recording/playback and when REMAIN HDD is set to MAIN or SUB), and alarm recording number (during alarm recording/playback).

“4”: Displays nothing.
(When an alarm signal is input, displays the date/month/year, day of the week, present time, and alarm recording number (during alarm recording/playback).)

“5”: Displays nothing.
(When a warning signal is input, displays a warning message.)

“6”: Displays nothing.

<MODE1>

```
01-01-2003 00:00:00
```

<MODE2>

```
01-01-2003 WED
00:00:00 12.5P
```

<MODE3>

```
01-01-2003 WED
00:00:00 12.5P  99% A00001
```

1. Press the SET UP button → <SETTINGS> → Select “DISPLAY MODE” in the <TIME DATE/DISPLAY SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

■ CLOCK LOCATION SETTING

This menu is used to set the display position of the date and present time.

1. Press the SET UP button → <SETTINGS> → Select “CLOCK LOCATION SETTING” in the <TIME DATE/DISPLAY SETTINGS> screen and then press the ENTER button.

- **The <CLOCK LOCATION SETTING> screen appears.**

```
··························
· 01-01-2003 00:00:00 ·····
··························
··························
··························
```

2. Use the JOG ◀, ▶, ▲, ▼ buttons to move the date and time display to the desired position and then press the ENTER button.

- **The setting is determined.**

3. Press the CLEAR button or the SET UP button.

■ CAMERA DISPLAY

This item is set to display the title and the memo which are set in “CAMERA TITLE/MEMO SETTING,” or to display the camera number only.

```
<TIME DATE/DISPLAY SETTINGS>
 TIME DATE ADJUST
 DISPLAY MODE                1
 CLOCK LOCATION SETTING
»CAMERA DISPLAY          NUMBER
 CAMERA TITLE/MEMO SETTING
 DUPLEX MODE DISPLAY     BOTTOM

<MODE 1>

01-01-2003 00:00:00
```

Setting (default: “NUMBER”)

“NUMBER”: Displays the camera number only.

“TITLE”: Displays the title set in “CAMERA TITLE/MEMO SETTING.” The title can be recorded along with the video.

“COMMENT”: Displays the comment set by RS-232C connection.

“NONE”: Displays nothing.

1. Press the SET UP button → <SETTINGS> → Select “CAMERA DISPLAY” in the <TIME DATE/DISPLAY SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

■ CAMERA TITLE/MEMO SETTING

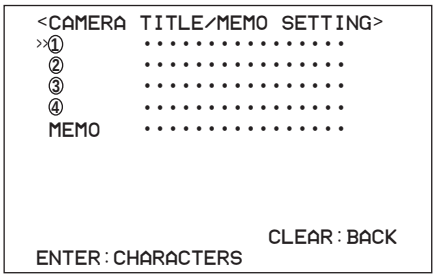
This item is used to set the titles individually to each connected camera. When selecting “TITLE” in “CAMERA DISPLAY,” the title, such as the location of the camera, appears on the screen for an easy-to-understand monitoring system.

➲ The maximum number of characters for the title is 16. The number of characters displayed on the screen is: all 16 for the single screen display, first 10 for the SPLIT4 screen display.

Example: Setting titles of “ENTRANCE” and “COUNTER” to camera number “①” and “④,” respectively, and setting memo of “BANK.”

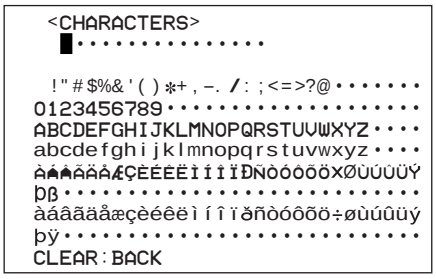
1. Press the SET UP button → <SETTINGS> → Select “CAMERA TITLE/MEMO SETTING” in the <TIME DATE/ DISPLAY SETTINGS> screen and then press the ENTER button.

• The <CAMERA TITLE/MEMO SETTING> screen appears.



2. Press the JOG ▲,▼ buttons to select camera number “①,” and then press the ENTER button.

• The <CHARACTERS> screen appears and the leftmost character of the string is highlighted.



3. Press the ENTER button.

• The leftmost character on the first line of the available characters, “ ” (space), turns red and flashes.

4. Use the JOG ◀, ▶,▲,▼ buttons to select “E” and then press the ENTER button.

• “E” appears on the leftmost of the string and be highlighted.

5. Press the JOG ▼ or ▶ button to highlight the next character on the right side.

6. Repeat steps 3 to 5 to input “ENTRANCE” in the string.

• To erase an input character, move the cursor to the leftmost character, “ ” (space), then press the ENTER button to determine such setting.

➲ To change a character input in error:

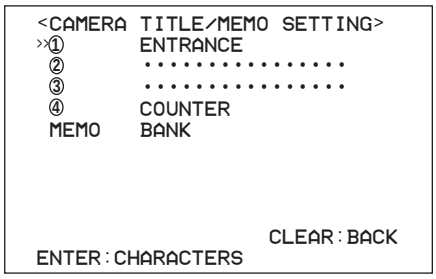
1. While one of the characters in the string is highlighted, press the JOG ◀, ▶, ▲, and ▼ buttons to highlight the character to be changed.

2. Follow the steps 3 and 4.

7. When completed with input, press the CLEAR button.

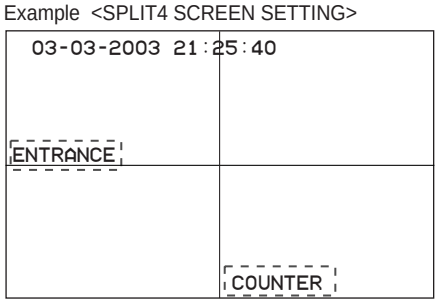
• The display returns to the <CAMERA TITLE/MEMO SETTING> screen.

8. Repeat steps 2 to 7 for camera number “④” and MEMO.

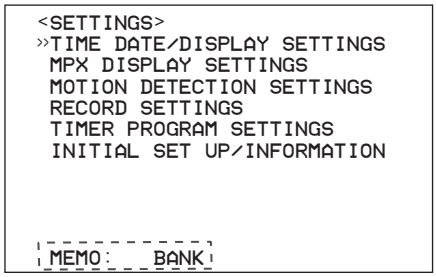


9. Press the CLEAR button or the SET UP button.

Example <SPLIT4 SCREEN SETTING>

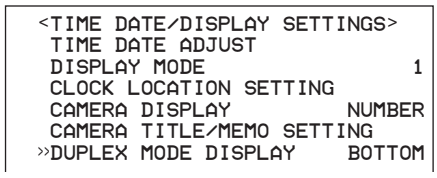


Example <MEMO SETTING>



■ DUPLEX MODE DISPLAY

This item is used to display the operational conditions such as PLAYBACK, REC and ALARM REC (ALARM REC is displayed in red during emergency recording), etc., on the top or bottom of the screen.



Setting (default : “BOTTOM”)

“BOTTOM”: Displays the operational condition on the bottom of the screen.

“NONE”: Does not display the operational condition.

“TOP”: Displays the operational condition on the top of the screen.

1. Press the SET UP button → <SETTINGS> → Select “DUPLEX MODE DISPLAY” in the <TIME DATE/DISPLAY SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

<MPX DISPLAY SETTINGS>

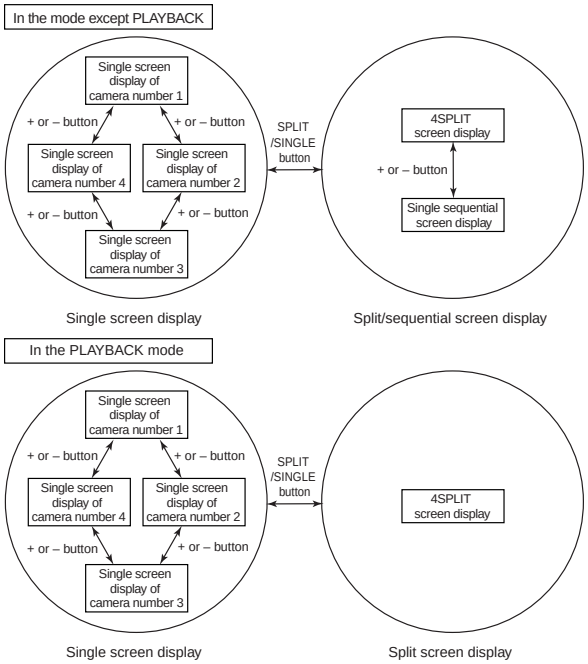
The multiplexer function of this unit allows the connected camera video to be displayed in the splited screen. It is also possible to set the order of the camera number to be displayed. For basic operations of the multiplexer, ☞ see page 22.

■ Multiplexer function related to button operations

♦ SPLIT/SINGLE, +, and – buttons

Each time you press the SPLIT/SINGLE button, the screen display is switched between the single screen display and split/sequential screen display.

When the +, – button is pressed during single screen display, the camera number can be switched.
When the +, – button is pressed during split/sequential screen display, the screen display is switched between the split screen display and the single sequential screen display.


In the mode except PLAYBACK
Single screen display of camera number 1
+ or – button
+ or – button
Single screen display of camera number 4
Single screen display of camera number 2
+ or – button
+ or – button
Single screen display of camera number 3
SPLIT /SINGLE button
4SPLIT screen display
+ or – button
Single sequential screen display
Single screen display
Split/sequential screen display
In the PLAYBACK mode
Single screen display of camera number 1
+ or – button
+ or – button
Single screen display of camera number 4
Single screen display of camera number 2
+ or – button
+ or – button
Single screen display of camera number 3
SPLIT /SINGLE button
4SPLIT screen display
Single screen display
Split screen display

➡ During playback, the single sequential screen display cannot be selected.

➡ Sequential playback in the single screen display is possible by setting “SEQUENTIAL PLAY” in the <HDD SETTINGS> to “ON.”

➡ The split screen display setting can be set using “SPLIT4 SCREEN SETTING” in the <MPX DISPLAY SETTINGS> screen.

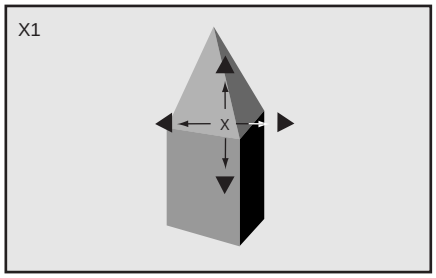
➡ The update speed of the camera video becomes slower as the number of connected camera increases. For smoother video playback, remove unnecessary cameras by setting “PPS” or “A-PPS” in the <RECORD SETTING> screen to “- - - - - -.”

♦ ZOOM and JOG buttons

When the ZOOM button is pressed during single screen display, magnification 100% screen appears and the magnification centre point (X) is displayed at the centre of the screen. Pressing the button again switches the magnification to 200%, and then 400%.

ⓘ The magnification display function can be set only during single screen display. The centre point moves vertically/horizontally by pressing the JOG buttons.

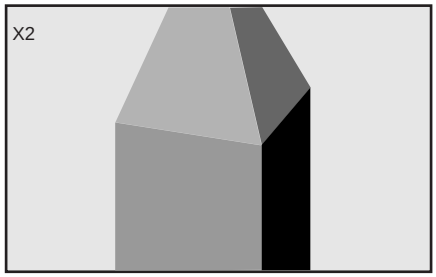
1. *Press the ZOOM button during single screen display.*
   - **X1 appears on the top left of the single screen display and the magnification centre point (X) appears at the centre of the screen.**

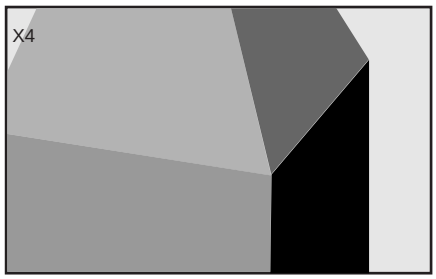


2. *To move the magnification centre point vertically or horizontally, press the JOG ◀, ▶, ▲, ▼ buttons.*

➡ The position of the magnification centre point is stored even when the display screen is switched or the power is turned off. This is convenient when the point to magnify is determined in advance.

3. *Press the ZOOM button.*
   - **Pressing the button switches the magnification in order of X2(200%), X4(400%), normal, and X1(100%).**





➡ The magnification function can also be used during playback.

INFORMATION

During playback of the video recorded by multiple cameras in the single screen display, a black screen may appear when pausing the playback and display the magnified screen. In this case press the JOG ▲, ▼ buttons to advance the image frame by frame, then the magnified screen appears.

INFORMATION

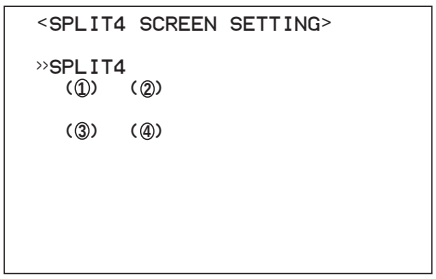
The magnification display function of this unit uses digital magnification and screen details may appear pixelized when magnifying.

■ SPLIT4 SCREEN SETTING

This menu is used to set the camera number to be displayed in the screen splited in 4.

1. Press the SET UP button → <SETTINGS> → Select "SPLIT4 SCREEN SETTING" in the <MPX DISPLAY SETTINGS> screen and then press the ENTER button.

- **The <SPLIT4 SCREEN SETTING> screen appears.**



2. Press the ENTER button.

- **The (upper left) camera number is highlighted.**

3. Press the JOG ▲,▼ buttons to move the highlighted camera number and then press the ENTER button.

- **The background of the camera number turns red and flashes.**

4. Press the JOG ▲,▼ buttons to display the camera number to be set and then press the ENTER button.

- **Flashing stops.**

ⓘ The same camera number can be set repeatedly in one split screen display. In this case, the video of that camera number is displayed in the position of the lowest camera number during playback.

5. Repeat steps 3 and 4 to set the desired camera number.

6. When completed with setting, press the CLEAR button.

- **Setting is determined and the cursor reappears.**

7. Press the CLEAR button or the SET UP button.

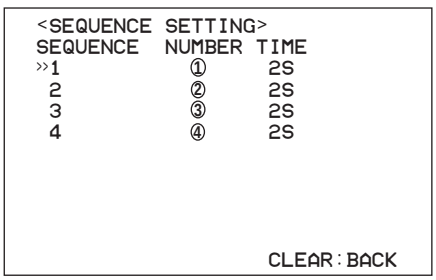
ⓘ The <SPLIT4 SCREEN SETTING> screen is not cleared even when pressing the SET UP button while a camera number is flashing.

■ SEQUENCE SETTING

This menu is used to set the switching order of the connected cameras, or to set the switching time. (The same camera number can be displayed repeatedly.)

1. Press the SET UP button → <SETTINGS> → Select "SEQUENCE SETTING" in the <MPX DISPLAY SETTINGS> screen and press the ENTER button.

- **The <SEQUENCE SETTING> screen appears.**



Setting of "NUMBER" (default: "①")

"①," "②," "③," "④," " - "

" - ": Displays nothing.

Setting of "TIME" (default: "2S")

"1S," "2S," • • • • • "30S"

2. Select the desired display order (1 to 4) and press the ENTER button twice.

- **The camera number is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

3. Display the desired camera number and press the ENTER button.

- **The setting is determined.**

4. Press the JOG ▼ button to highlight "TIME" setting and press the ENTER button.

- **The background of the setting item turns red and flashes.**

5. Display the desired switching time and press the ENTER button.

- **The setting item is determined and flashing stops.**

6. Press the CLEAR button.

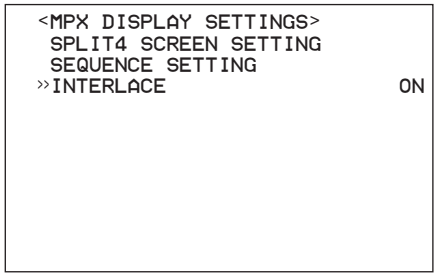
- **The cursor reappears.**

7. Repeat steps 2 to 5 to set other displaying order and the switching time.

8. When completed with all the settings, press the CLEAR button or the SET UP button.

■ INTERLACE

This item is used to set the picture quality when splitting the screen of camera video.



Setting (default: "ON")

"ON": Displays video in detail.

"OFF": Reduces screen flickering.

ⓘ Although flickering of video during split screen display can be reduced by setting "INTERLACE" to "OFF," the vertical resolution gets lower.

1. Press the SET UP button → <SETTINGS> → Select "INTERLACE" in the <MPX DISPLAY SETTINGS> screen. Display the desired setting and determine such setting.

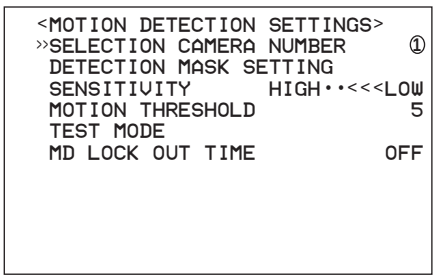
2. Press the CLEAR button or the SET UP button.

<MOTION DETECTION SETTINGS>

This menu is used to set the conditions of the motion detection function for alarm recording which is started when detecting motion within the video of the connected camera.

■ SELECTION CAMERA NUMBER

This item is used to set the camera number for which motion detection function is executed. Since settings can be made for each camera individually, more detailed settings are possible.



Setting (default: "①")

"①," "②," "③," "④"

ⓘ When selecting the <MOTION DETECTION SETTINGS> screen during single screen display of any specified camera number, that camera number is displayed as the initial setting of "SELECTION CAMERA NUMBER."

1. Press the SET UP button → <SETTINGS> → Select "SELECTION CAMERA NUMBER" in the <MOTION DETECTION SETTINGS> screen. Display the desired setting and determine such setting.

2. When "SELECTION CAMERA NUMBER" setting is determined, the background screen is switched to the video of the selected camera number.

3. Press the CLEAR button or the SET UP button.

ⓘ The motion detection function does not operate while the <MOTION DETECTION SETTINGS> screen is displayed.

■ DETECTION MASK SETTING

This item is used to set the area to activate motion detection. Any of the 192 dotted detection areas which are equally splited to 16 X 12 pixel sizes of the individually loaded video of each connected camera can be selected.

Definition of setting mark (default: all areas "●" (active))

"●": Area activated with motion detection.

" • ": Area inactivated with motion detection.

➲ It is possible to set multiple areas for one camera.

Example of screen setting

For the video loaded from the camera number set in "SELECTION CAMERA NUMBER":

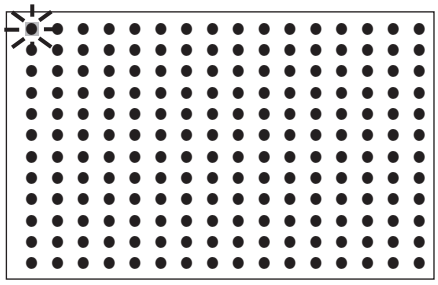
• Displaying "●" for the right half of the screen to activate motion detection.

• Displaying " • " for the left half of the screen to inactivate motion detection.

1. In "SELECTION CAMERA NUMBER," select the camera for which the detection area is set.

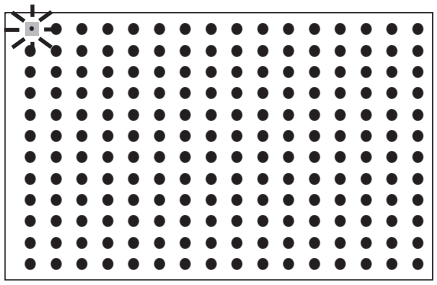
2. Select "DETECTION MASK SETTING" and press the ENTER button.

• The dotted screen with detection areas is displayed and the background of the most upper left dot turns red and flashes.



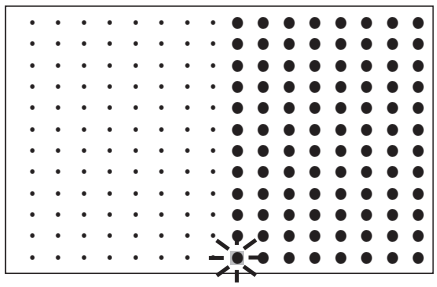
3. Use the JOG ◀, ▶, ▲, ▼ buttons to select the dot to activate/inactivate and press the ENTER button.

• The "●" (active) setting changes to " • " (inactive) setting.



➲ When pressing the + button, all the dots change to "●" (active). When pressing the – button, all the dots change to " • " (inactive).

4. Repeat step 3 to activate/inactivate all the desired dots.



5. Press the CLEAR button.

• The setting is determined and the display returns to the <MOTION DETECTION SETTINGS> screen.

ⓘ While setting the detection mask, other settings are not accepted. To exit the menu screen during setting, press the CLEAR button.

■ SENSITIVITY

This item is used to set the sensitivity of detecting the changes of the loaded video data. Video data is sampled every 0.5 second and compared with each video data of 0.5 second before for each camera. The sensitivity setting is divided into the 5 levels of difference in brightness.

```
<MOTION DETECTION SETTINGS>
 SELECTION CAMERA NUMBER      ①
 DETECTION MASK SETTING
»SENSITIVITY       HIGH••<<<LOW
 MOTION THRESHOLD             5
 TEST MODE
 MD LOCK OUT TIME           OFF
```

Setting (default: "HIGH • • < < < LOW")
"HIGH • • • • < LOW," "HIGH • • • < < LOW,"
"HIGH • • < < < LOW," "HIGH • < < < < LOW,"
"HIGH < < < < < LOW"

➲ Sensitivity increases as "<" increases from "HIGH • • • • < LOW" to "HIGH < < < < < LOW."

➲ To detect the slightest changes, set to "HIGH < < < < < LOW." However, detection may not operate properly due to flickering of fluorescent lighting, etc.

1. In "SELECTION CAMERA NUMBER," select the camera for which the sensitivity is set.

2. Display the desired setting in "SENSITIVITY" and press the ENTER button.
- **The setting item is determined.**

■ MOTION THRESHOLD

This item is used to set the minimum number of dots for starting the motion detection operation from the number of active dots within the detection area. Motion detection function operates when detecting the change that exceeds the number of dots set as the minimum.

```
<MOTION DETECTION SETTINGS>
 SELECTION CAMERA NUMBER      ①
 DETECTION MASK SETTING
 SENSITIVITY       HIGH••<<<LOW
»MOTION THRESHOLD             5
 TEST MODE
 MD LOCK OUT TIME           OFF
```

Setting (default: "5")
"1," "2," "3," "4," "5,"• • • • • ,"191," "192"

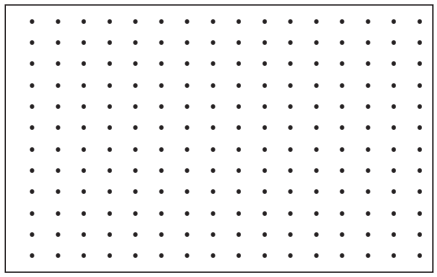
ⓘ Set MOTION THRESHOLD to the number less than the number set as the active dots in the detection area. The motion detection function does not operate when setting MOTION THRESHOLD to a value exceeds that number.

1. In "SELECTION CAMERA NUMBER," select the camera for which the motion threshold is set.

2. Display the desired setting in "MOTION THRESHOLD" and press the ENTER button.
- **The setting item is determined.**

■ TEST MODE

This item is used to test the motion detection function on the condition you have set.



1. In "SELECTION CAMERA NUMBER," select the camera to be tested.

2. Select "TEST MODE" and press the ENTER button.
- **The operation test begins.**

3. To end "TEST MODE," press the CLEAR button.
- **During test operation, active areas of motion detection are displayed using "•." "●" is displayed when the motion which is met the conditions of sensitivity and MD lock out time is detected. If the motion detection does not operate properly, set the conditions again.**

ⓘ This test is executed under the condition you have set in the <MOTION DETECTION SETTINGS> screen.

■ MD LOCK OUT TIME

This item is used to restrict motion detection function in order to control the recording to prevent the continuous recording of the same image. Once the unit detects motion and starts alarm recording, the unit ignores the input of mortion detection for the time period set in the MD LOCK OUT TIME. Thus alarm recording is not extend for that time and the unit prevents an excess of continuous recording of the same object.

ⓘ Set the setting value carefully because the necessary image may not be recorded due to the restriction of the alarm recording. It is recommended to set “MD LOCK OUT TIME” to “OFF” when there is no need to set this item.

ⓘ This function restricts the detection of the coutinuous motion for the specified time period. The number of alarms listed in alarm list may increase depending on the setting.

<MOTION DETECTION SETTINGS>
SELECTION CAMERA NUMBER ①
DETECTION MASK SETTING
SENSITIVITY HIGH•••<<<LOW
MOTION THRESHOLD 5
TEST MODE
»MD LOCK OUT TIME OFF

Setting (default: “OFF”)
“OFF,” “5S,” “10S,” “15S,” “30S,” “45S,” “60S,” “120S”

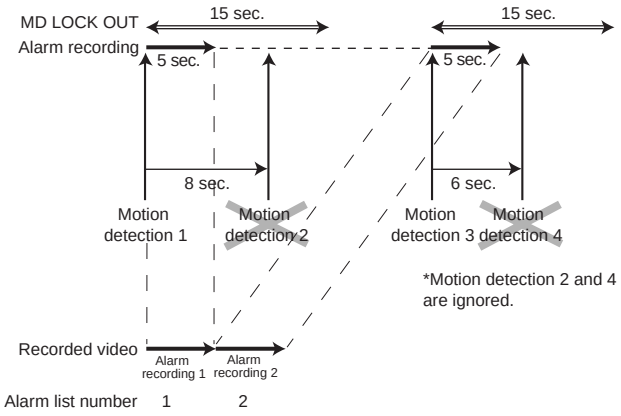
1. In “SELECTION CAMERA NUMBER,” select the camera for which the MD lock out time is set.

2. Display the desired setting in “MD LOCK OUT TIME” and press the ENTER button.

- **The setting item is determined.**

ⓘ The motion detection function may not start immediately after cancelling alarm interrupt.

Example
When setting MD LOCK OUT TIME and ALARM REC DURATION to 15S and 5S respectively:



Points to notice concerning motion detection

• If changes are detected repeatedly, alarm recording is also started repeatedly. Thus functions such as setting change, etc., will not be accepted. In this case, press the ALARM INTERRUPT button to forcibly stop the motion detection function for a period of 5 minutes. During this time, settings can be changed. This manual stop is automatically restored after 5 minutes and the history of the manual stop is left in the <WARNING LOG LIST> screen. To cancel the alarm interrupt, press the ALARM INTERRUPT button again. The ALARM INTERRUPT button does not function while the menu screen is displayed on the monitor.

• For the input signals of alarm recording, ALARM IN terminal on the rear panel is constantly given priority over the others. If the motion detection setting is active, alarm recording is started when the ALARM IN terminal is grounded or when motion is detected.

• The motion detection of this unit may not operate correctly depending on the conditions of the input video signals especially when the “SENSITIVITY” is set to high setting. Be careful when connecting to a system, etc., that is set to alarm when the motion detection function of this unit is operated.

• To perform alarm recording during motion detection, set “TRIGGER” in the <ALARM SETTING> screen to “MD,” “MD/EXT,” or “MD&EXT” and set “A-PPS” of the corresponding camera number in the <RECORD SETTING> to other than “- - - - - -.”

• Motion detection does not operate while making settings in the <MOTION DETECTION SETTINGS> screen.

• The motion may not be detected when many motions are detected or many alarm signals are input simultaneously.

■ Settings concerning normal recording and alarm recording

This unit allows you to set the setting items for normal recording and alarm recoding individually. It means, more detailed settings are possible, such as changing the recording intervals of the camera which inputs the alarm signals while leaving the normal recording settings as they are.

ⓘ Some settings and mode are limited to change during alarm recording. Pressing the ALARM INTERRUPT button halts additional alarm input and stops recording.

ⓘ While recording, the setting in the <RECORD SETTING> screen cannot be changed.

ⓘ When setting the camera number of which the camera is not connected in <RECORD SETTING>, warning display of "NO SIGNAL" appears (☞ see "Warnings and CALL OUT output" on page 81).

■ Recording mode settings for normal recording and alarm recording

Setting the following items:

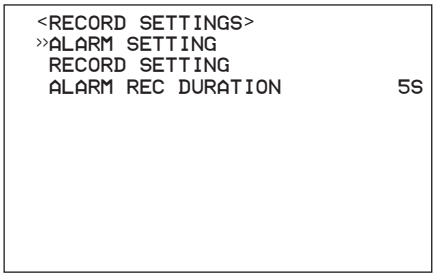
• The recording camera and trigger for alarm recording (<ALARM SETTING>)

• The camera selection during alarm recording ("ALARM TYPE" in <ALARM SETTING> or <RECORD SETTING>)

• Recording intervals and recording picture quality for normal recording and alarm recording (<RECORD SETTING>)

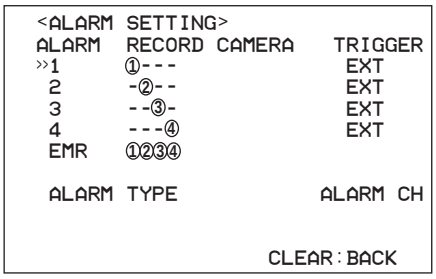
• Whether to execute pre-alarm recording for alarm recording ("PRE ALARM REC" in <RECORD SETTING>)

Pre-alarm recording is a function to start recording a few seconds before the ALARM IN terminal on the rear panel is grounded or motion is detected (for the details of pre-alarm recording, ☞ see page 61).



♦ ALARM SETTING

This menu is used to set the recording camera and trigger for alarm recording.



1. Press the SET UP button → <SETTINGS> → Select "ALARM SETTING" in the <RECORD SETTINGS> screen and then press the ENTER button.

- **The <ALARM SETTING> screen appears.**

2. (When setting the camera number and trigger for the alarm recording • • •)
Press the JOG ▲,▼ buttons to select the number for setting the camera number and then press the ENTER button.

- **The leftmost setting item of "RECORD CAMERA" is highlighted.**
- **The camera numbers are lined in order of the number from "①" to "④."**

3. Press the JOG ▲,▼ buttons to highlight the desired camera number and then press the ENTER button.

- **The background of the camera number turns red and flashes.**

ⓘ The menu screen is not cleared even when pressing the SET UP button while the setting item is flashing.

4. Press the JOG ▲,▼ buttons to display the desired setting and then press the ENTER button.

- **The setting item is determined and flashing stops.**

5. Press the JOG ▼ button to highlight the setting item of "TRIGGER" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

6. Press the JOG ▲,▼ buttons to select the desired setting and then press the ENTER button.

- **The setting item is determined and flashing stops.**

Setting of "TRIGGER" (default: "EXT")

"EXT": Starts alarm recording only when the ALARM IN terminal is grounded.

"MD&EXT": Starts alarm recording when the ALARM IN terminal is grounded and the motion is detected simultaneously.

"MD/EXT": Starts alarm recording when the ALARM IN terminal is grounded or the motion is detected.

"MD": Starts alarm recording only when the motion is detected.

ⓘ When you set the "TRIGGER" to MD&EXT, MD/EXT, or MD, the motion detection function is active immediately and any setting changes cannot be accepted. To change the setting, clearing the menu screen first and then press the ALARM INTERRUPT button.

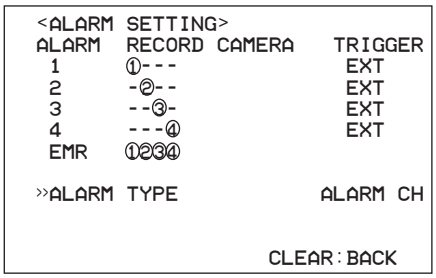
7. When the settings are completed, press the CLEAR button.

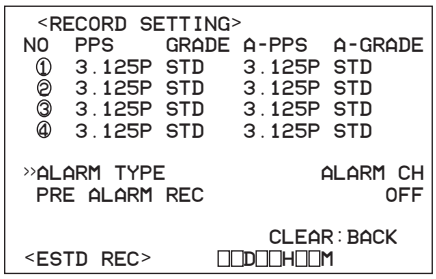
- **The cursor reappears to the left side of the number.**
- **To continue with other numbers, press the JOG buttons to move the cursor to the desired number and repeat steps 4 to 7.**

8. Press the CLEAR button or the SET UP button.

♦ ALARM TYPE

This item is used to set the camera selection during alarm recording.





Setting (default: “ALARM CH”)

“ALARM CH”: Performs alarm recording only by the cameras set for alarm recording and input with alarm signals. When there is an input of alarm signals from multiple cameras, performs alarm recording by all the cameras containing alarm signals.

“ALARM PLUS”: Performs alarm recording by the camera input with alarm signals during normal recording at the frame speed set in “A-PPS” while all the other cameras record in the normal PPS.

1. Press the SET UP button → <SETTINGS> → Select “ALARM SETTING” or “RECORD SETTING” in the <RECORD SETTINGS> screen and then press the ENTER button.

- **The <ALARM SETTING> or the <RECORD SETTING> screen appears.**

2. Press the JOG ▲,▼ buttons to move the cursor to “ALARM TYPE” and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

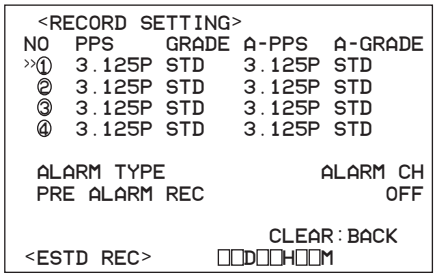
3. Display the desired item and then press the ENTER button.

- **The setting item is determined and flashing stops.**

4. Press the CLEAR button or the SET UP button.

♦ RECORD SETTING

This menu is used to set the recording interval and recording picture quality for normal recording and alarm recording.



CAUTION: For <ESTD REC>,
☞ see “Continuous recording time table” on page 77.

Setting of “PPS” and “A-PPS” (default: “3.125P”)

“6.25P,” “3.125P,” “2.083P,” “1.563P,” “1.25P,” “1.042P,” “0.781P,” “0.625P,” “0.25P,” “0.125P,” “0.063P,” “0.031P,” “- - - - - -”

“- - - - - -”: Does not perform recording with camera set to this item.

Setting of “GRADE” and “A-GRADE” (default: “STD”)

“SUPER,” “HIGH,” “STD”(STANDARD), “BASIC,” “LONG”

1. Press the SET UP button → <SETTINGS> → Select “RECORD SETTING” in the <RECORD SETTINGS> screen and press the ENTER button.

- **The <RECORD SETTING> screen appears.**

2. Press the JOG ▲,▼ buttons to select the desired camera number and then press the ENTER button twice.

- **The setting item of “PPS” is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

➲ For the details concerning normal recording settings, ☞ see “Setting the recording interval and recording picture quality for normal recording” on pages 25 and 26.

3. Display the desired item and then press the ENTER button.

- **The setting item is determined and flashing stops.**

4. Press the JOG ▼ button to highlight the setting item of “GRADE” and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

5. Display the desired item and then press the ENTER button.

- **The setting item is determined and flashing stops.**

6. (When setting recording intervals and recording picture quality for alarm recording • • •)
Repeat steps 4 and 5 to select desired settings for “A-PPS” and “A-GRADE” as well.

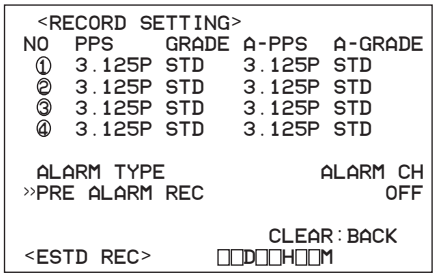
7. When the settings are completed, press the CLEAR button.

- **The cursor reappears to the left side of the number.**
- **To continue with other numbers, press the JOG buttons to move the cursor to the desired number and repeat steps 2 to 7.**

8. Press the CLEAR button or the SET UP button.

♦ PRE ALARM REC

This item is used to set the pre-alarm recording.



Setting (default: “OFF”)

“OFF,” “SHORT,” “MEDIUM,” “LONG”

➲ For the pre-alarm recording time, ☞ see “Pre-alarm recording time table” on pages 77 and 78.

ⓘ When you set “SHORT,” “MEDIUM,” or “LONG” in the PRE ALARM REC, normal recording cannot be performed. Set the PRE ALARM REC to “OFF” to perform normal recording or alarm recording.

ⓘ When you set “SHORT,” “MEDIUM,” or “LONG” in the PRE ALARM REC, it is recommended not to change the settings in ALARM REC DURATION and RECORD SETTING. If you change these settings, the recording may be performed in the previous settings depending on the timing of the recording. When you want to change the settings in ALARM REC DURATION and RECORD SETTING while setting the PRE ALARM REC to “SHORT,” “MEDIUM,” or “LONG,” set PRE ALARM REC to “OFF” first.

1. Press the SET UP button → <SETTINGS> → Select “RECORD SETTING” in the <RECORD SETTINGS> screen and then press the ENTER button.

- **The <RECORD SETTING> screen appears.**

2. Press the JOG ▲,▼ buttons to move the cursor to “PRE ALARM REC” and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

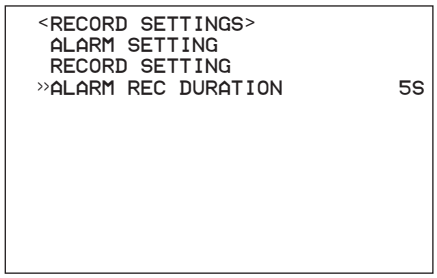
3. Display the desired item and then press the ENTER button.

- **The setting item is determined and flashing stops.**

4. Press the CLEAR button or the SET UP button.

■ ALARM REC DURATION

This item is used to set the recording time period for alarm recording.



Setting (default: “5S”)

“2S,” “5S,” “10S,” “15S,” “30S,” “45S,” “1M,” “2M,” “5M,” “10M,” “20M,” “30M,” “60M,” “MANUAL”

“MANUAL”: Continues alarm recording until the ALARM IN terminal is ungrounded.

1. Press the SET UP button → <SETTINGS> → Select “ALARM REC DURATION” in the <RECORD SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

ⓘ When the alarm list tends to increase, it is recommended to set ALARM REC DURATION to “5S” or more.

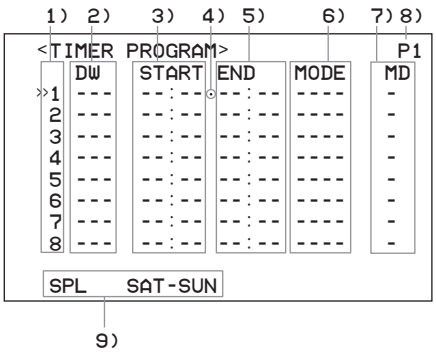
■ TIMER PROGRAM SETTINGS

This menu is used to set up to 3 most frequently used operation patterns. By individually setting the recording camera, recording interval, and recording picture quality for normal recording/alarm recording to REC MODE A to REC MODE D, settings can be changed instantly by switching REC MODE.

ⓘ Before you start recording, accurately set the date and present time (for setting the date and time, ☞ see page 24).

■ TIMER PROGRAM

✦ Structure of the <TIMER PROGRAM> screen



1) PROGRAM NUMBER
Set up to 8 programs to 1 REC MODE.

2) DW
Set day of the week from “SUN” to “SAT.”

“DAY”: Records at the programmed time everyday.

“SPL”: Records for the period specified in “9) SPL (special day of the week setting).”

“HOL”: Applies holidays specified in the <HOLIDAY SETTING> screen.

3) REC START TIME
The time is indicated using the 24-hour system.

ⓘ When the recording period of 2 or more programs are overlapped, the higher-numbered program is given priority for recording.

4) NEXT DAY INDICATOR
This mark appears when recording continues to the following day.

5) REC END TIME

6) MODE
“A” to “D”: Records by using the recording cameras and recording intervals which are set in “REC MODE A” to “REC MODE D” of the <TIMER PROGRAM SETTINGS> screen (for the details of REC MODE settings, ☞ see page 46).

“SKIP”: Temporarily skips timer recording (the recording of that program number is not made for the specified time period).

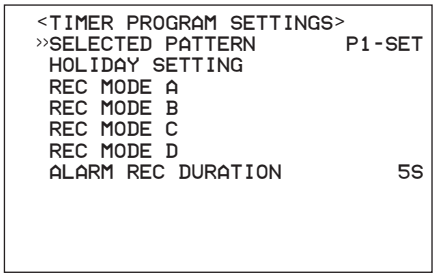
7) MD
Sets the motion detection function to on or off.

8) Displays the selected timer program number (P1 - P3).

9) SPL (special day of the week setting)
Sets the start and end day of the week. When selecting “SPL” in “DW,” the period from the start day of the week to end day of the week set here is active.

Example: Setting the timer program to program number 1 in <TIMER PROGRAM> P2, in REC MODE A, on Wednesday to Saturday from 12:30 to 13:00, and with motion detection (MD) set to “ON.”

1. Press the SET UP button → <SETTINGS> → Select <TIMER PROGRAM SETTINGS> screen.



2. Check that the cursor is positioned at “SELECTED PATTERN” and then press the ENTER button twice.

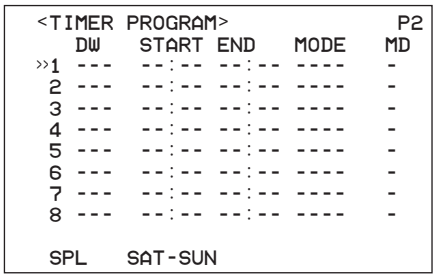
- **The “P1” display is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

3. Press the JOG ▲,▼ buttons to select “P2” and then press the ENTER button.

- **The setting item is determined and flashing stops.**

4. Press the JOG ▼ button to highlight “SET” and then press the ENTER button.

- **The <TIMER PROGRAM> screen appears.**



5. Check that the cursor is positioned at the program number “1” and then press the ENTER button twice.

- **The setting item of “DW” is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

6. Press the JOG ▲,▼ buttons to display “SPL” in “DW” and press the ENTER button.

- **The setting item is determined and flashing stops.**

➲ When selecting the wrong day of the week, press the ENTER button and press the JOG ▲,▼ buttons to display the correct day of the week and then press the ENTER button again.

7. Press the JOG ▼ button to highlight the setting item of "hour" of the start time and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

8. Press the JOG ▲,▼ buttons to display "12" and then press the ENTER button.
- **The setting item is determined and flashing stops.**

9. Repeat steps 7 and 8 to set "30" in "minutes" of the start time, and "13" in "hour" and "00" in "minutes" of the end time, and then determine such setting.

10. Press the JOG ▼ button to highlight the setting item of "MODE" and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

11. Press the JOG ▲,▼ buttons to display "A" and then press the ENTER button.
- **The setting item is determined and flashing stops.**

12. Press the JOG ▼ button to highlight the setting item of "MD" and press the ENTER button.
- **The background of the setting item turns red and flashes.**

13. Press the JOG ▲,▼ buttons to display "ON" and then press the ENTER button.
- **The setting item is determined and flashing stops.**

14. Press the CLEAR button.
- **The cursor reappears on the left side of the program number.**

15. (When programming other timer recording in other program number • • •)
Press the JOG ▲,▼ buttons to select the desired program number and then press the ENTER button twice. Then repeat steps 6 to 14.

16. Press the JOG ▲,▼ buttons to select "SPL" and then press the ENTER button twice.
- **The "start day" display is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.**

17. Press the JOG ▲,▼ buttons to display "WED" and then press the ENTER button.
- **The setting item is determined and flashing stops.**

18. Press the JOG ▼ button to highlight the end day and then press the ENTER button.
- **The background of the end day setting turns red and flashes.**

19. Press the JOG ▲,▼ buttons to display "SAT" and then press the ENTER button.
- **The setting item is determined and flashing stops.**

```
<TIMER PROGRAM>                P2
   DW   START END   MODE   MD
»1 SPL  12:30 13:00 A      ON
 2 ---  --:-- --:-- ----   -
 3 ---  --:-- --:-- ----   -
 4 ---  --:-- --:-- ----   -
 5 ---  --:-- --:-- ----   -
 6 ---  --:-- --:-- ----   -
 7 ---  --:-- --:-- ----   -
 8 ---  --:-- --:-- ----   -

 SPL   WED-SAT
```

20. Press the CLEAR button or the SET UP button.
- **Press the CLEAR button to return the cursor on the left side of "SPL."**
- **Press the SET UP button to clear the <TIMER PROGRAM> screen and return to the normal screen.**

ⓘ If there is an unset item in the program (- - - display), the setting screen can not be exited even when pressing the CLEAR button. In this case, set all the unset items.

21. Press both the TIMER ON/OFF buttons.
- **Timer recording starts when the present time is within the programmed recording period.**
- **The power turns off and the unit is in the timer recording standby mode when the present time is not within the programmed recording period.**
- **Timer recording/timer recording standby mode can be cancelled by pressing both the TIMER ON/OFF buttons again.**

ⓘ TIMER ON/OFF buttons do not function during alarm recording.

➲ To erase programmed contents or to exit the program without completing the settings, press and hold the WARNING RESET button for more than 3 seconds.

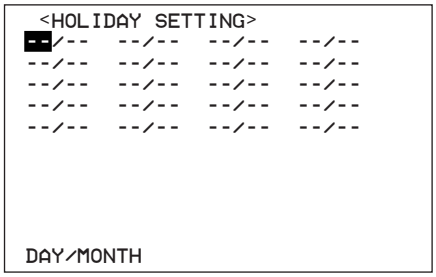
INFORMATION

Recording is not performed if there is an error in the setting. To prevent such errors for timer recording, this unit notifies errors using methods shown below. If there is an error in the setting, take the necessary procedures shown below.

Unit status	Description of error	Countermeasure	Page
"TIMER" display flashes on the screen and the series of short beeps (beep-beep-beep) sounds.	1) The date/time is not set. 2) Timer program setting has not been set to operate. 3) Program is currently being set.	1) Set the date/time. 2) Set the correct program. 3) Determine the settings.	24 44, 45 44, 45
Timer recording does not perform even when the programmed time is reached.	1) "HDD REPEAT REC MAIN" in <HDD SETTINGS> is set to "OFF" or "STANDBY," or "HDD REPEAT REC SUB" in <HDD SETTINGS> is set to "OFF." 2) There is no HDD space left.	• Press and hold the WARNING RESET button to clear the warning display. • Set the "HDD REPEAT REC MAIN" in <HDD SETTINGS> to "ON," and set the "HDD REPEAT REC SUB" in <HDD SETTINGS> to "OFF." • Press the REC/STOP buttons when "HDD REPEAT REC MAIN" in <HDD SETTINGS> is set to "STANDBY."	47

■ HOLIDAY SETTING

This menu is used to set holidays throughout the year.



1. Press the SET UP button → <SETTINGS> → Select "HOLIDAY SETTING" in the <TIMER PROGRAM SETTINGS> screen and determine desired holidays.

2. Press the CLEAR button or the SET UP button.

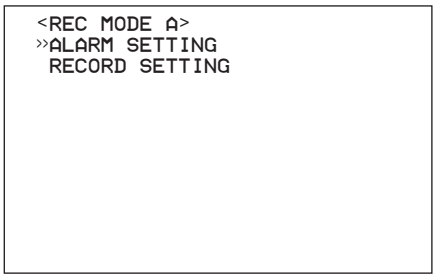
ⓘ When setting a holiday in "HOLIDAY SETTING" and select "HOL" in the day of the week settings, the program selected with "HOL" is given priority over the other programs.

■ Recording mode settings A to D for normal recording and alarm recording

The recording camera, recording intervals, and recording picture quality for normal recording/alarm recording can be set to 4 patterns of recording mode, A to D (☞ see pages 25 and 26 for "Setting the recording interval and recording picture quality for normal recording," pages 41 to 43 for "Recording mode settings for normal recording and alarm recording").

1. Press the SET UP button → <SETTINGS> → Select "REC MODE A" in the <TIMER PROGRAM SETTINGS> screen and then press the ENTER button.

- **The <REC MODE A> screen appears.**



2. Press the JOG ▲,▼ buttons to select either "ALARM SETTING" or "RECORD SETTING" and determine such setting.

- **☞ see page 41 for "ALARM SETTING," page 42 for "RECORD SETTING," page 43 for "PRE ALARM REC."**

ⓘ When you set "SHORT," "MEDIUM," or "LONG" in the PRE ALARM REC, normal recording cannot be performed. Set the PRE ALARM REC to "OFF" to perform normal recording or alarm recording.

ⓘ When you set "A-PPS" in the <RECORD SETTING> screen to "- - - - -" for all the cameras, pre-alarm recording is not performed even if PRE ALARM REC is set to "SHORT," "MEDIUM," or "LONG." In this case, normal recording is performed at the interval which is set in "PPS."

3. To continue with REC MODE B to REC MODE D, repeat steps 1 and 2.

ⓘ The storage area in MAIN HDD set in "PARTITION" is displayed with the percentage (%) and the recordable time of that storage area is displayed in <ESTD REC> (for PARTITION, ☞ see page 70).

■ ALARM REC DURATION

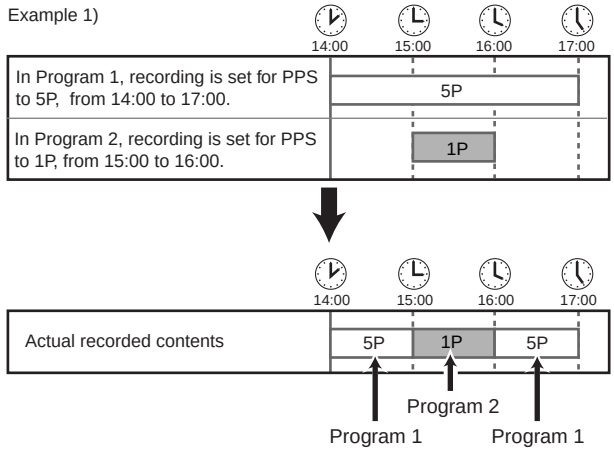
The recording time period for alarm recording can be set (for ALARM REC DURATION, ☞ see page 43).

♦ Overlapped timer program settings

When the programmed period of timer program settings are overlapped, the unit gives priority to the higher-numbered program.

Example 1

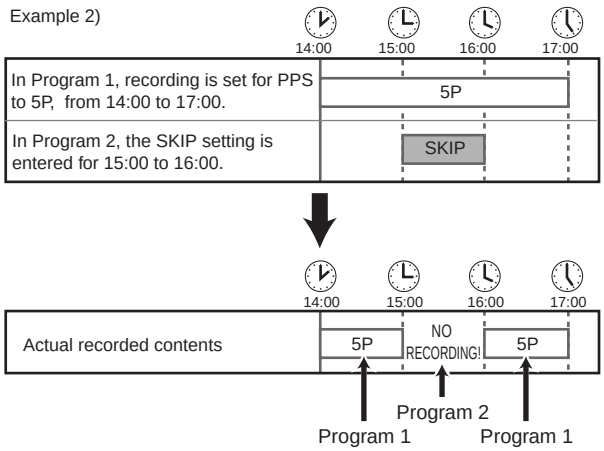
• Program 1 is set for 14:00 to 17:00 with the PPS of 5P.
• Program 2 is set for 15:00 to 16:00 with the PPS of 1P.
Under this condition, the unit will give priority to Program 2 for the duration of the overlapping period, from 15:00 to 16:00. The unit will operate as shown in the chart below.



Example 2

• Program 1 is set for 14:00 to 17:00 with the PPS of 5P.
• Program 2 is set for 15:00 to 16:00 with the SKIP setting.

Again, the unit will give priority to Program 2 for the duration of the overlapping period. As shown in the illustration below, the unit will activate the Skip setting from 15:00 to 16:00.



■ HDD SETTINGS

♦ HDD REPEAT REC MAIN/HDD REPEAT REC SUB

This item is used to set the operation when HDD space becomes full during recording.

```
<HDD SETTINGS>
»HDD REPEAT REC MAIN          ON
 HDD REPEAT REC SUB          OFF
 HDD REPEAT PLAY             OFF
 IM-CHECK PLAY               OFF
 SEQUENTIAL PLAY             OFF
```

ⓘ "HDD REPEAT REC SUB" appears when "HDD SETTING" in <INITIALIZATION> screen is set to "PARTITION."

Setting (default of HDD REPEAT REC MAIN: "ON," default of HDD REPEAT REC SUB: "OFF")

"ON": Automatically returns to the beginning of the HDD and resumes recording (by overwriting the existing data).

"STANDBY": Stops recording and switches to the standby mode. Recording resumes when both REC/STOP buttons are pressed. Recording pauses when the alarm input is continuously grounded or during timer recording, then, recording resumes from the beginning of the HDD.

"OFF": Stops recording and "REC/FULL" or "REC/SUB FULL" appears on the screen. To resume recording, press and hold the WARNING RESET button for more than 3 seconds to clear the "REC/FULL" or "REC/SUB FULL" display and then press both REC/STOP buttons.

ⓘ When an error occurs to one HDD and another HDD does not affected by this error, the recording continues with another HDD.

ⓘ "STANDBY" is displayed only in "HDD REPEAT REC MAIN."

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "HDD REPEAT REC MAIN" or "HDD REPEAT REC SUB" in the <HDD SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

♦ HDD REPEAT PLAY

This item is used to playback the recorded contents of the HDD repeatedly.

```
<HDD SETTINGS>
 HDD REPEAT REC MAIN          ON
 HDD REPEAT REC SUB          OFF
»HDD REPEAT PLAY             OFF
 IM-CHECK PLAY               OFF
 SEQUENTIAL PLAY             OFF
```

Setting (default: "OFF")

"ON": Automatically resumes playback from the beginning of the recorded data when the recorded data is played back to the end.

"OFF": Stops playback when the recorded data is played back to the end.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "HDD REPEAT PLAY" in the <HDD SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

♦ IM-CHECK PLAY

This item is used to check whether the recorded video or the recording date/time is altered.

```
<HDD SETTINGS>
 HDD REPEAT REC MAIN          ON
 HDD REPEAT REC SUB          OFF
 HDD REPEAT PLAY             OFF
»IM-CHECK PLAY               OFF
 SEQUENTIAL PLAY             OFF
```

Setting (default: "OFF")

"ON": Executes alteration check during playback and displays a warning at the point of alteration.

"OFF": Does not execute alteration check.

ⓘ This function may cause problems during recording and playback. Normally, set this function to "OFF."

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "IM-CHECK PLAY" in the <HDD SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

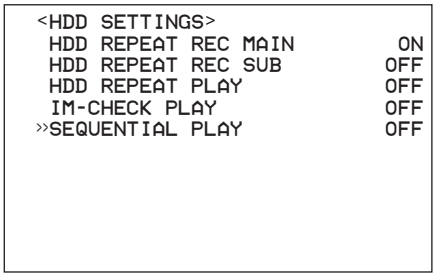
3. Select the HDD to execute alteration check and then start playback.

ⓘ Warning is also displayed for the portion where the recorded data is damaged for some reason.

ⓘ When executing complex playback operations with the PLAY or REV.P button during alteration check, the "IMAGE MODIFIED" warning may appear. Execute alteration check during normal playback.

♦ SEQUENTIAL PLAY

This item is used to make backups of the video recorded with this unit to an analog video recorder etc. while playing back the video of each camera in the single screen display. The playback order and time of each camera will be the order of the recorded video.



Setting (default: "OFF")

"ON": Executes the sequential playback in the single screen display.

"OFF": Does not execute the sequential playback in the single screen display.

➲ Sequential playback is executed at a playback interval of 25P.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "SEQUENTIAL PLAY" in the <HDD SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

3. Press the PLAY button.

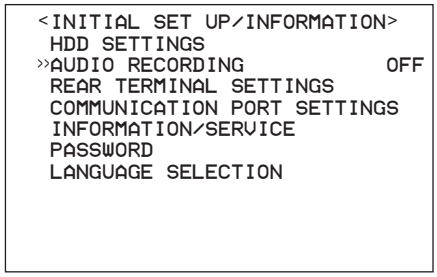
4. Press the SPLIT/SINGLE button to display the single screen display and then press the +, – button to display the recorded video.

- **Sequential playback in the single screen display starts.**

➲ When performing sequential playback for video with long recording intervals, the video of the highest camera number selected for recording is played back for the longest time.

■ AUDIO RECORDING

This item is used to simultaneously record audio along with the video. When recording audio, the continuous recording time becomes shorter than when recording only video.



Setting (default: "OFF")

"ON": Records video and audio.

"ALARM": Records video and audio during alarm recording and emergency recording.

"OFF": Does not record audio.

1. Press the SET UP button → <SETTINGS> → Select "AUDIO RECORDING" in the <INITIAL SET UP/INFORMATION> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

ⓘ When setting "AUDIO RECORDING" to "ON," a speaker display (🔊) appears next to <ESTD REC> in the <RECORD SETTING> and <REC MODE A> to <REC MODE D> screens.

ⓘ Even when setting "AUDIO RECORDING" to "ON," audio cannot be recorded under the following settings.

• Audio recording cannot be performed when "PPS" of "RECORD SETTING" for normal recording are all set to the value smaller than "0.333P."
In this case, (🔊 X) appears to the right of <ESTD REC>.

• When the "ALARM TYPE" during alarm recording is set as follows:

"ALARM CH": "A-PPS" of all the cameras set for alarm recording are set to the value smaller than "0.333P."

"ALARM PLUS": "PPS" and "A-PPS" of all the cameras set for normal recording and alarm recording are set to the value smaller than "0.333P."

ⓘ The recorded audio may be interrupted while playback depending on the recording settings.

■ REAR TERMINAL SETTINGS

♦ MODE OUT 1 to MODE OUT 5

These items are used to output the status of this unit from the MODE OUT terminals on the rear panel. There are 5 MODE OUT terminals. Set output type for each terminal individually.

```
<REAR TERMINAL SETTINGS>
»MODE OUT 1                  OFF
 MODE OUT 2                  OFF
 MODE OUT 3                  OFF
 MODE OUT 4                  OFF
 MODE OUT 5                  OFF
 KEY SOUND                    ON
 BUZZER                      OFF
 REMAIN HDD            MAIN-10%
 CALL OUT SETTINGS
 EMERGENCY REC DURATION     10M
```

Setting (default: “OFF”)

“REC”: Outputs signals during recording.

“PLAY”: Outputs signals during playback.

“REMAIN”: Outputs signals when the remaining HDD capacity reaches the value specified in “REMAIN HDD.”

“POWER”: Outputs signals when the power of the unit turns on.

“MOTION1” to “MOTION4”: Outputs the signal from the specified MODE OUT terminal when detecting motion by a specified camera number. For example, when you set MODE OUT 1 to MOTION 1, the signal is output from the MODE OUT 1 terminal when detecting motion by the camera number 1. Furthermore, the last input of the motion detection maintained for 2 seconds.

“ALARM”: Outputs signals during alarm recording.

“LAN”: Controls ON/OFF of the terminal set to this item via PC by using the specified application.

“CALL OUT”: Outputs CALL OUT signal when the error occurs to the unit. Refer to the table on page 81.

“OFF”: Does not output signal.

ⓘ Remaining warning from MODE OUT is output only during recording.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “REAR TERMINAL SETTINGS” screen.

2. For the desired terminal (from MODE OUT 1 to MODE OUT 5), display the desired setting and then determine such setting.

3. To set other terminals, repeat step 2.

4. Press the CLEAR button or the SET UP button.

♦ KEY SOUND

This item is used to make button sounds when using the operational buttons.

```
<REAR TERMINAL SETTINGS>
 MODE OUT 1                  OFF
 MODE OUT 2                  OFF
 MODE OUT 3                  OFF
 MODE OUT 4                  OFF
 MODE OUT 5                  OFF
»KEY SOUND                    ON
 BUZZER                      OFF
 REMAIN HDD            MAIN-10%
 CALL OUT SETTINGS
 EMERGENCY REC DURATION     10M
```

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “KEY SOUND” in the <REAR TERMINAL SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

♦ BUZZER

This item is used for a buzzer to sound when the remaining HDD capacity reaches the value set in “REMAIN HDD” of the <REAR TERMINAL SETTINGS> screen. Other than the above, it is possible to set the buzzer to sound when starting alarm recording or emergency recording, or when a warning is displayed.

```
<REAR TERMINAL SETTINGS>
 MODE OUT 1                  OFF
 MODE OUT 2                  OFF
 MODE OUT 3                  OFF
 MODE OUT 4                  OFF
 MODE OUT 5                  OFF
 KEY SOUND                    ON
»BUZZER                      OFF
 REMAIN HDD            MAIN-10%
 CALL OUT SETTINGS
 EMERGENCY REC DURATION     10M
```

To sound a buzzer only when reaching a specified remaining HDD capacity:

1) Select “REMAIN” for “BUZZER” in the <REAR TERMINAL SETTINGS> screen.

2) Set the remaining capacity in “REMAIN HDD” of the <REAR TERMINAL SETTINGS> screen.

To sound a buzzer when reaching the specified remaining HDD capacity and when a warning is displayed:

1) Select “WARNING” for “BUZZER” in the <REAR TERMINAL SETTINGS> screen.

2) Set the remaining HDD capacity (HDD MAIN REMAIN/ HDD SUB REMAIN) in “CALL OUT SETTINGS” of the <REAR TERMINAL SETTINGS> screen.

Setting (default: “OFF”)
“OFF,” “REMAIN,” “WARNING,” “ALARM”

SETTING / BUZZER	REMAIN	WARNING	ALARM	OFF
When reaching the remaining capacity set in “REMAIN HDD”	ON	OFF	OFF	OFF
When a failure occurs and a warning is displayed	OFF	ON	OFF	OFF
When an alarm recording or emergency recording is started	OFF	OFF	ON	OFF

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “BUZZER” in the <REAR TERMINAL SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

♦ REMAIN HDD

This item is used to output a warning when the remaining HDD capacity becomes low during recording. Set the HDD and remaining capacity for this warning.

<REAR TERMINAL SETTINGS>
MODE OUT 1 OFF
MODE OUT 2 OFF
MODE OUT 3 OFF
MODE OUT 4 OFF
MODE OUT 5 OFF
KEY SOUND ON
BUZZER OFF
»REMAIN HDD MAIN-10%
CALL OUT SETTINGS
EMERGENCY REC DURATION 10M

➲ A warning is output using the following methods when the remaining capacity becomes low during recording.
• The recorded capacity of HDD flashes when “3” is set to “DISPLAY MODE” in the <TIME DATE/ DISPLAY SETTINGS> screen.
• A buzzer sounds when “REMAIN” is set to “BUZZER” in the <REAR TERMINAL SETTINGS> screen.

Setting of HDD (default: “MAIN”)
“MAIN”: Displays a warning of low MAIN HDD capacity.

“SUB”: Displays a warning of low SUB HDD capacity.

“OFF”: Does not display warning of low HDD capacity.

ⓘ “SUB” appears when “HDD SETTING” in <INITIALIZATION> screen is set to “PARTITION.”

Setting of “REMAIN HDD” capacity (default: “10%”)
“2%,” “4%,” “6%,” “8%,” “10%,” “15%,”“20%,” “30%,” “40%,” “50%”

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “REMAIN HDD” in the <REAR TERMINAL SETTINGS> screen and then press the ENTER button twice.
• The setting item of selecting HDD is highlighted when the ENTER button is pressed once. When the button is pressed again, the background turns red and flashes.

2. Press the JOG ▲,▼ buttons to display the desired HDD and then press the ENTER button.
• The setting item is determined and flashing stops.

3. Press the JOG ▼ button to highlight the REMAIN HDD capacity and then press the ENTER button.
• The background of the setting item turns red and flashes.

4. Press the JOG ▲,▼ buttons to display the desired capacity and then press the ENTER button.
• The setting item is determined and flashing stops.

5. Press the CLEAR button or the SET UP button.

♦ CALL OUT SETTINGS

This menu is used to output warning signals from the MODE OUT terminal which is set to “CALL OUT” in <REAR TERMINAL SETTINGS> screen to the device connected to that terminal.

<CALL OUT SETTINGS>
»HDD MAIN REMAIN OFF
HDD MAIN FULL OFF

HDD SUB REMAIN OFF
HDD SUB FULL OFF

ⓘ <CALL OUT SETTINGS> is available when any of the MODE OUT 1 to 5 settings are set to “CALL OUT.”

ⓘ “HDD SUB REMAIN” and “HDD SUB FULL” appear when “HDD SETTING” in <INITIALIZATION> screen is set to “PARTITION.”

• HDD MAIN REMAIN/HDD SUB REMAIN

When reaching the specified remaining HDD capacity, a signal is output from the MODE OUT terminal which is set to “CALL OUT” in <REAR TERMINAL SETTINGS> screen and “REC/REM” appears on the screen.

Setting (default: “OFF”)
“2%,” “4%,” “6%,” “8%,” “10%,” “15%,”“20%,” “30%,” “40%,” “50%,” “OFF”

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → <REAR TERMINAL SETTINGS> → Select “HDD MAIN REMAIN” or “HDD SUB REMAIN” in the <CALL OUT SETTINGS> screen. Display the desired setting and determined such setting.

2. Press the CLEAR button or the SET UP button.

➲ By pressing and holding the WARNING RESET button for more than 3 seconds, the HDD capacity warning from the MODE OUT terminal which is set to “CALL OUT” in <REAR TERMINAL SETTINGS> screen can be cleared.

INFORMATION

For the relationship between the warning display and CALL OUT signal output, ☞ see page 81. The warning display of the item written “Fixed” in the CALL OUT output column displays unconditionally. For the item written “Selectable” in the CALL OUT output column, you can set the condition that CALL OUT signal is output. For example, the buzzer can be set to sound when reaching a value set in “HDD MAIN REMAIN” or “HDD SUB REMAIN” of the <CALL OUT SETTINGS> screen when “BUZZER” in the <REAR TERMINAL SETTINGS> screen is set to “WARNING.”

• **HDD MAIN FULL/HDD SUB FULL**

When the recordable HDD capacity becomes empty, a signal is output from the MODE OUT terminal which is set to “CALL OUT” in <REAR TERMINAL SETTINGS> screen and a “REC/FULL” appears on the screen for MAIN HDD. (For SUB HDD, “REC/SUB FULL” appears.)

Setting (default: “OFF”)

“ON”: Outputs a signal when the recording capacity becomes empty.

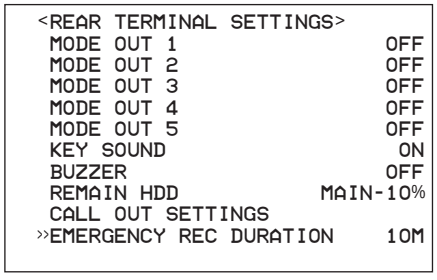
“OFF”: Does not output a signal when the recording capacity becomes empty.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → <REAR TERMINAL SETTINGS> → Select “HDD MAIN FULL” or “HDD SUB FULL” in the <CALL OUT SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

♦ **EMERGENCY REC DURATION**

This item is used to set the recording time for emergency recording.



➲ For the details concerning EMERGENCY RECORDING settings, ☞ see page 61.

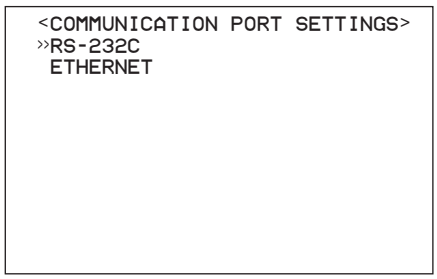
Setting (default: “10M”)

“1M,” “2M,” “5M,” “10M,” “20M,” “30M,” “60M”

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “EMERGENCY REC DURATION” in the <REAR TERMINAL SETTINGS> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

■ COMMUNICATION PORT SETTINGS

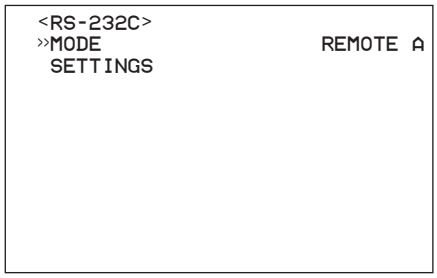


♦ **RS-232C**

This menu is used to set the communication device connected to the RS-232C connector on this unit.

• **MODE**

This item is used to remotely control this unit via a PC connected to the RS-232C terminal. Comments can also be input via a PC and recorded along with the video.



Setting (default: “REMOTE A”)

“REMOTE A”: Controls this unit via a PC and this unit returns all the state information.

“REMOTE B”: Controls this unit via a PC and this unit returns only the state transition information.

“REMOTE C”: Controls this unit via a PC and this unit returns nothing.

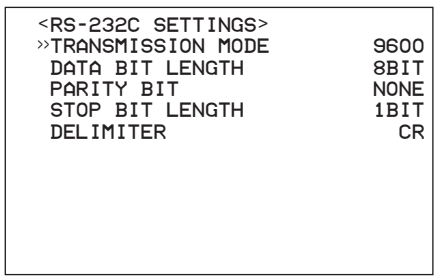
“OFF”: Does not control this unit via a PC.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “MODE” in the <RS-232C> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

• **RS-232C SETTINGS**

This menu is used to set the RS-232C settings when setting “MODE” above to “REMOTE A,” “REMOTE B,” or “REMOTE C.”



⚠ Set all the settings to the same values as the controlling PC.

Setting of “TRANSMISSION MODE” (default: “9600”)
“1200,” “2400,” “4800,” “9600,” “19200”

Setting of “DATA BIT LENGTH” (default: “8BIT”)
“8BIT,” “7BIT”

Setting of “PARITY BIT” (default: “NONE”)
“NONE,” “ODD,” “EVEN”

Setting of “STOP BIT LENGTH” (default: “1BIT”)
“1BIT,” “2BIT”

Setting of “DELIMITER” (default: “CR”)
“CR,” “CR•LF”

1. Set RS-232C “MODE” to “REMOTE A,” “REMOTE B,” or “REMOTE C.”

2. Select “SETTINGS” and then press the ENTER button.
- **The <RS-232C SETTINGS> screen appears.**

3. Select the setting to be changed and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

4. Display the desired setting item and then press the ENTER button.
- **The setting item is determined and flashing stops.**

5. To make additional changes, repeat steps 3 and 4.

6. Press the CLEAR button or the SET UP button.

♦ ETHERNET

This menu is used to set the IP ADDRESS which is to specify the connected recorder, SUB NET MASK, or GATEWAY, and to confirm MAC ADDRESS.

ⓘ Do not assign “000.000.000.000” to IP address. And do not assign it as the broadcast address. If this address is assigned, communications or any other functions of the recorder unit may not function correctly.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select “ETHERNET” in the <COMMUNICATION PORT SETTINGS> screen and then press the ENTER button.
- **The <ETHERNET> screen appears.**

```
<ETHERNET>
»IP ADDRESS     192.168.000.100
 SUB NET MASK   255.255.255.000
 GATEWAY        000.000.000.000
 E-MAIL ADDRESS
 SERVICE PORT SETTING
 ALARM NOTIFICATION SETTING

<MAC ADDRESS>
              08-00-70-2E-20-AD
 PLEASE PRESS SET UP BUTTON
 TO APPLY NEW SETTING
```

2. Select the setting to be changed by pressing the JOG ▲,▼ buttons and then press the ENTER button.
- **The leftmost number of the setting item is highlighted.**

3. Press the JOG ▲,▼ buttons to highlight the number to be changed and then press the ENTER button.
- **The background of the selected number turns red and flashes.**

4. Press the JOG ▲,▼ buttons to display the desired number and then press the ENTER button.
- **The setting item is determined and flashing stops.**
- **To display the cursor, press the CLEAR button.**

5. Repeat steps 2 to 4 to change the other numbers.

ⓘ The setting cannot be changed during recording. Stop recording to change the setting.

ⓘ When you change the items in the <ETHERNET> screen, press the SET UP button while the cursor is on the left side of the item. (In this case, the CLEAR button does not function. However, when you change “WARNING,” “ALARM SENS,” “REC MODE,” or “RETRY TIME” in <ALARM NOTIFICATION SETTING> only, the CLEAR button functions.) The unit turns the power off automatically, and then boots-up.

• E-MAIL ADDRESS

This item is used to refer the setting of “SMTP SERVER,” “RECORDER ID,” and “USER ADDRESS.” This menu is for displaying the setting only.

ⓘ The specified software is required to input “SMTP SERVER,” “RECORDER ID,” and “USER ADDRESS.” Please refer to the instruction manual of the software.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → <COMMUNICATION PORT SETTING> → Select “E-MAIL ADDRESS” in the <ETHERNET> screen.
- **The <E-MAIL ADDRESS> screen appears.**

```
<E-MAIL ADDRESS>
 SMTP SERVER

 RECORDER ID

 USER ADDRESS
1
2
3
4
5
```

ⓘ “E-MAIL ADDRESS” is displayed only first 20 characters.

• SERVICE PORT SETTING

This menu is used to set the port number to connect personal computer.

ⓘ Do not change the setting without sufficient knowledge about the network setting.

ⓘ When performing port setting except “WEB,” the specified software is required. Please refer to the instruction manual of the software.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → <COMMUNICATION PORT SETTINGS> → select “SERVICE PORT SETTING” in the <ETHERNET> screen.
- **The <SERVICE PORT SETTING> screen appears.**

```
<SERVICE PORT SETTING>
»WEB                        •00080
 USER ACCESS                 53705
 SUPER USER                  53706
 LIVE USER1                  53707
 LIVE USER2                  53708
 LIVE USER3                  53709
 LIVE USER4                  53710
```

2. Press the JOG ▲,▼ buttons to select the desired setting and then press the ENTER button.
- **The first figure of the port number is highlighted.**

3. Press the JOG ▲,▼ buttons to highlight the number to be changed and then press the ENTER button.
- **The background of the selected number turns red and flashes.**

4. Press the JOG ▲,▼ buttons to display the desired port number and then press the ENTER button.
- **The setting item is determined and stops flashing.**
- **To display the cursor, press the CLEAR button.**

ⓘ When you change "WEB" setting, the " • " displayed on the left of the port number turns its color from green to red.

5. To change other settings, repeat steps 2 to 4.

6. Return to the <ETHERNET> screen by pressing the CLEAR button and then press the SET UP button to exit if no changes are made.

7. When settings are changed, press the SET UP button. (In this case, the CLEAR button does not function.) The unit is reset and turned on again automatically.

• ALARM NOTIFICATION SETTING

This menu is used to transmit warning signals or signals of status change such as a short circuit of a rear terminal to the connected PC.

ⓘ The specified software is required. Please refer to the instruction manual of the software.

ⓘ Issuing of reports to broadcast addresses is not supported.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → <COMMUNICATION PORT SETTING> → Select "ALARM NOTIFICATION SETTING" in the <ETHERNET> screen.
- **The <ALARM NOTIFICATION SETTING> screen appears.**

```
<ALARM NOTIFICATION SETTING>
 NO   IP ADDRESS     TARGET OWN
»1 000.000.000.000 •55111 01111
 2 000.000.000.000 •55111 01112
 3 000.000.000.000 •55111 01113
 4 000.000.000.000 •55111 01114
 5 000.000.000.000 •55111 01115

 WARNING                     OFF
 ALARM SENS                  OFF
 REC MODE                    OFF
 RETRY TIME                  10S
```

2. (When setting the IP ADDRESS or port setting number, etc. of the connected PC • • •)
Press the JOG ▲,▼ buttons to select the desired setting number and then press the ENTER button.
- **The first figure of the port number is highlighted.**

3. Press the JOG ▲,▼ buttons to highlight the figure of IP ADDRESS, TARGET PORT, and OWN PORT to be changed and then press the ENTER button.
- **The background of the selected number turns red and flashes.**

4. Press the JOG ▲,▼ buttons to display the desired number and then press the ENTER button.
- **The setting item is determined and flashing stops.**
- **To display the cursor, press the CLEAR button.**

ⓘ When TARGET PORT number is set to 00000 to 01023, the " • " situated on the left of the value turns red from green, and in case of 01024 to 49151, it turns yellow.

5. To change other setting number, repeat steps 2 to 4.

6. (When setting the contents to transmit to the connected PC • • •)
Press the JOG ▲,▼ buttons to select the desired setting and press the ENTER button.
- **The background of the setting item turns red and flashes.**

Setting of "WARNING" (default: "OFF")
"ON": Transmits warning message to the connected PC. E-mail is sent to address displayed on "USER ADDRESS" of the <E-MAIL ADDRESS> screen.

"OFF": Does not transmit the warning message.

Setting of "ALARM SENS" (default: "OFF")
"ON": Transmits the state to the connected PC when the ALARM IN terminal is short circuited. E-mail is sent to address displayed on "USER ADDRESS" of the <E-MAIL ADDRESS> screen.

"OFF": Does not transmit the state.

Setting of "REC MODE" (default: "OFF")
"ON": Transmits the state of normal recording or alarm recording, etc. to the connected PC. E-mail is sent to address displayed on "USER ADDRESS" of the <E-MAIL ADDRESS> screen.

OFF: Does not transmit the state.

Setting of "RETRY TIME" (default: "10S")
1S, 2S, • • • •, 10S, • • • • • 59S, 60S

7. Press the JOG ▲,▼ buttons to display the desired setting and then press the ENTER button.
- **The setting item is determined and flashing stops.**

8. Return to the <ETHERNET> screen by pressing the CLEAR button and then press the SET UP button to exit if no changes are made.

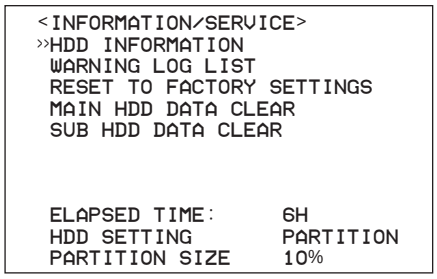
9. When settings are changed, press the SET UP button. (In this case, the CLEAR button does not function.) The unit is reset and turned on again automatically.

ⓘ When you change "WARNING," "ALARM SENS," "REC MODE," or "RETRY TIME" only, the CLEAR button is also available.

■ INFORMATION/SERVICE

This menu is used to check the log list or list of power failures, etc., and to initialize the menus.

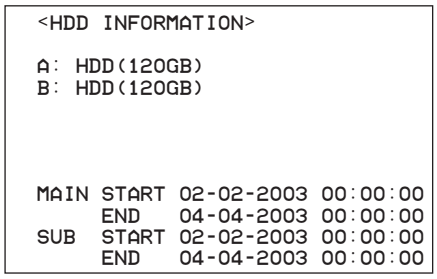
At the bottom of the screen, the following information appears.
• The accumulated operation time since the beginning of usage ("ELAPSED TIME")
• The HDD setting of MIRRORING, PARTITION, or NORMAL mode ("HDD SETTING" and "PARTITION SIZE")



ⓘ "SUB HDD DATA CLEAR" and "PARTITION SIZE" appear when "HDD SETTING" in <INITIALIZATION> screen is set to "PARTITION."

♦ HDD INFORMATION

This menu is used to check the recorded range of the HDD.



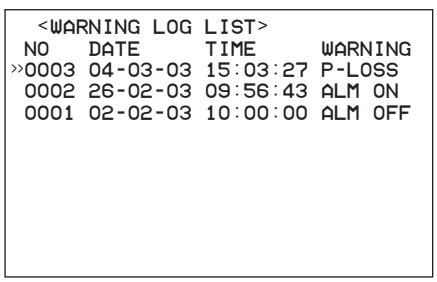
ⓘ Recording start and end times of "SUB" HDD appear when "HDD SETTING" in <INITIALIZATION> screen is set to "PARTITION."

1. (To check the recorded range of the HDD • • •)
Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "HDD INFORMATION" in the <INFORMATION/SERVICE> screen. Display the desired setting and determine such setting.

2. Press the CLEAR button or the SET UP button.

♦ WARNING LOG LIST

This menu is used to check the number, date, time, and type of failures.



The failures displayed in the WARNING LOG LIST: (☞ see page 81).

"P-LOSS": Power failure.

"SYS RST": Reset button is pressed and the unit is reset.

"ALM OFF": ALARM INTERRUPT button is pressed and the unit is put on interruption.

"ALM ON": Alarm interrupt is cancelled manually by pressing ALARM INTERRUPT button. Alarm interrupt is cancelled automatically after 5 minutes from the start of interruption.

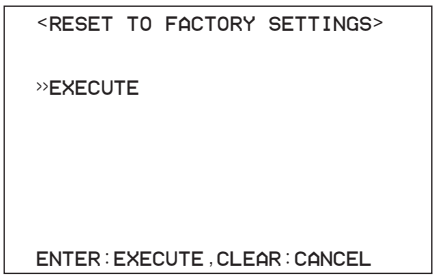
1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "WARNING LOG LIST" in the <INFORMATION/SERVICE> screen. Press the ENTER button.
- **The <WARNING LOG LIST> screen appears.**
- **The WARNING LOG LIST displays up to 1000 items. When the number of items exceeds this limit, the latest 1000 items are displayed.**
- **JOG ▲ button : Selection moves to the next number.**
- **JOG ▼ button : Selection moves to the previous number.**
- **JOG ▶ button : Displays the page with date prior to the date of the currently opened page.**
- **JOG ◀ button : Displays the page with date newer than the date of the currently opened page.**

➲ When a failure occurs while the <WARNING LOG LIST> screen is displayed, exit the screen and display the screen again. A new item will be added to the list.

2. Press the CLEAR button or the SET UP button.

♦ RESET TO FACTORY SETTINGS

This menu is used to initialize menu screen settings.



1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "RESET TO FACTORY SETTINGS" in the <INFORMATION/SERVICE> screen. Press the ENTER button.
- **The <RESET TO FACTORY SETTINGS> screen appears.**
- **When cancelling the intialization of the menu screen settings, press the CLEAR button.**

2. Press the ENTER button.
- **The menu screen settings are initialized.**

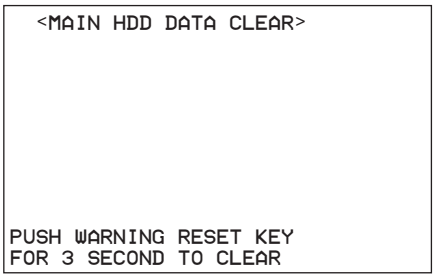
3. Press the CLEAR button or the SET UP button.

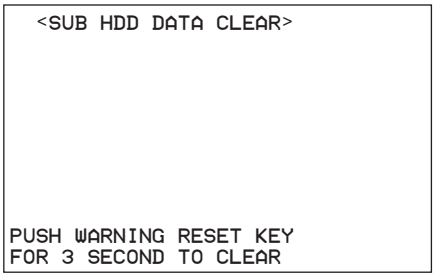
ⓘ The setting of present time, password, and timer program are not reset.

ⓘ When you execute RESET TO FACTORY SETTINGS with the setting of IP ADDRESS, SUB NET MASK, GATEWAY, SERVICE PORT SETTING in <ETHERNET> screen or IP ADDRESS, TARGET, OWN in <ALARM NOTIFICATION SETTING> screen changed, the power turns off and the unit boots-up.

♦ MAIN HDD DATA CLEAR/SUB HDD DATA CLEAR

This menu is used to erase the data recorded on the MAIN HDD or SUB HDD.





ⓘ When executing "MAIN HDD DATA CLEAR" while mirroring function is in operation, all the data will be erased.

ⓘ Data cannot be erased while the HDD is accessed such as recording/playback.

ⓘ When executing HDD CLEAR while the pre-alarm recording is set, the first pre-alarm recording of the HDD may be displayed in the incorrect number.

1. Press the SET UP button → <SETTINGS> → <INITIAL SET UP/INFORMATION> → Select "MAIN HDD DATA CLEAR" or "SUB HDD DATA CLEAR" in the <INFORMATION/SERVICE> screen. Press the ENTER button.

- **"PUSH WARNING RESET KEY FOR 3 SECOND TO CLEAR" appears on the bottom of the screen.**
- **To cancel erasing, press the CLEAR button.**

ⓘ When executing "MAIN HDD DATA CLEAR" or "SUB HDD DATA CLEAR" while the PASSWORD of level 4 has been registered and the lock is turned on, <UNLOCK PASSWORD> screen appears. In this case, release the lock first.

2. Press the WARNING RESET button for more than 3 seconds.

- **"CLEARING ..." appears on the screen.**

3. Press the CLEAR button or the SET UP button.

■ PASSWORD

This unit is equipped with 2 lock functions:
SIMPLE LOCK: Does not require to enter a password when unlocking.
PASSWORD LOCK: Requires to enter a password when unlocking.

• When the password for unlocking is not set, lock function executes in SIMPLE LOCK.
• When the password for unlocking is set, lock function executes in PASSWORD LOCK.

➲ When the MAIN switch on the rear panel is set to ON, SIMPLE LOCK/PASSWORD LOCK setting can be made even with the POWER button on the front panel set to OFF.

ⓘ When the MAIN switch on the rear panel is set to OFF or when a menu is displayed, SIMPLE LOCK and PASSWORD LOCK do not function.

♦ SIMPLE LOCK

When SIMPLE LOCK is turned on, buttons other than the SPLIT/SINGLE, +, – , and ZOOM buttons, and the MAIN switch become inoperable and the unit is locked in the current mode.

To activate simple lock • • •

1. Press and hold the LOCK button for more than 3 seconds while both the MAIN switch is set to ON.

- **The lock turns on. "LOCK" displays on the screen when "DUPLEX MODE DISPLAY" in <TIME DATE/DISPLAY SETTINGS> screen is set to "TOP" or "BOTTOM."**

To release simple lock • • •

1. Press and hold the LOCK button for more than 3 seconds.

- **The lock is released.**

♦ PASSWORD LOCK

There are 2 types of PASSWORD LOCK, "OPERATION CONTROL" and "HDD DATA CLEAR."
"OPERATION CONTROL" has 3 levels of lock (level 1 to 3).
"HDD DATA CLEAR" (level 4) locks the settings of "MAIN HDD DATA CLEAR" and "SUB HDD DATA CLEAR."

<Using "OPERATION CONTROL" of PASSWORD LOCK (level 1 to 3)>

1) Input the PASSWORD of levels 1 to 3.

2) Set the PASSWORD LOCK.

- **The PASSWORD LOCK of level 1 turns on.**

➲ When the PASSWORD LOCK of level 1 turns on, operations for all the functions are locked.

3) Unlock the PASSWORD LOCK of level 1.

- **The PASSWORD LOCK of level 2 turns on.**

➲ When the PASSWORD LOCK of level 2 turns on, only the SPLIT/SINGLE, +, –, and ZOOM buttons are operable.

4) Unlock the PASSWORD LOCK of level 2.

- **The PASSWORD LOCK of level 3 turns on.**

➲ When the PASSWORD LOCK of level 3 turns on, the SET UP button and ALARM INTERRUPT button are locked.

5) Unlock the PASSWORD LOCK of level 3.

- **The PASSWORD LOCK of all the levels are released.**

➲ You can operate all the functions.

ⓘ In the levels 1 and 2, press and hold the LOCK button to display the <UNLOCK PASSWORD> screen, and then input the PASSWORD to release the lock.
In the level 3, press the SET UP button to display the <UNLOCK PASSWORD> screen and then input the PASSWORD.

➲ When the MAIN switch on the rear panel is set to ON, the PASSWORD can be registered, set, and cancelled even when the POWER button on the front panel is turned OFF.

To register the PASSWORD • • •

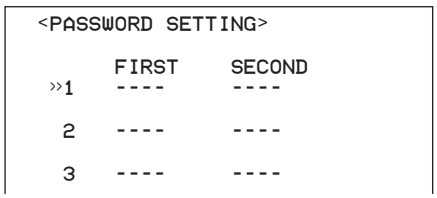
Register a 4-digit number for PASSWORD. When setting the number of each digit, choose the number from 0 to 9.

1. Press the SET UP button → <SETTINGS> → Select "PASSWORD" in the <INITIAL SET UP/INFORMATION> screen. Press the ENTER button.

- **The <PASSWORD> screen appears.**

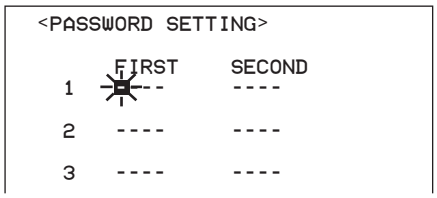
2-1. (When registering the PASSWORD for OPERATION CONTROL (levels 1 to 3) • • •)
Confirm that the cursor is positioned at "OPERATION CONTROL" and then press the ENTER button.

- **The <PASSWORD SETTING> (levels 1 to 3) screen appears.**



2-2. Confirm that the cursor is positioned on the left side of level "1" and then press the ENTER button.

- **The first input position of "FIRST" is highlighted and flashes.**

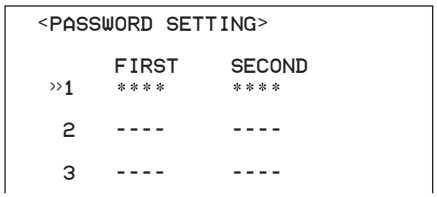


2-3. Input 4 digits of the PASSWORD by pressing the number buttons.

- **1: SPLIT/SINGLE button**
- **2: + button**
- **3: JOG ◀ button**
- **4: JOG ▲ button**
- **5: JOG ▶ button**
- **6: – button**
- **7: CLEAR button**
- **8: JOG ▼ button**
- **9: ENTER button**
- **0: SEARCH button**
- **The first input position of "SECOND" is highlighted.**

2-4. Input the same PASSWORD entered in "FIRST."

- **The cursor reappears to the left side of the setting of level 1.**



ⓘ Input the same number in "FIRST" and "SECOND." The setting returns to step 2-1 when the different PASSWORD number is input.

2-5. Press the JOG ▲,▼ buttons to move the cursor to the left side of level 2 and press the ENTER.

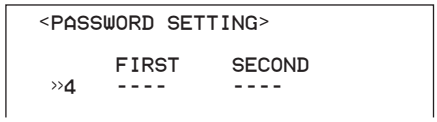
2-6. Repeat steps 2-3 to 2-5 to set levels 2 and 3.

ⓘ It is not necessary to input the PASSWORD for all the levels, 1 to 3. Input the PASSWORD for the desired level only.

2-7. Press the CLEAR button.

3-1. (When registering the PASSWORD for HDD DATA CLEAR (level 4) • • •)
Press the JOG ▲,▼ buttons to move the cursor to "HDD DATA CLEAR" and then press the ENTER button.

- **The <PASSWORD SETTING> (level 4) screen appears.**



3-2. Repeat steps 2-2 to 2-4 to set level 4.

4. Press the CLEAR button or SET UP button.

To activate the PASSWORD LOCK • • •

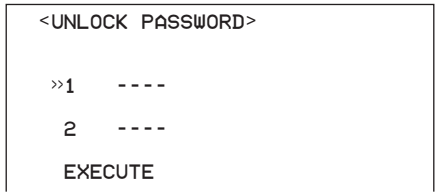
1. Press and hold the LOCK button for more than 3 seconds while the MAIN switch is set to ON.

- **The PASSWORD LOCK turns on. "LOCK" displays on the screen when "DUPLEX MODE DISPLAY" in <TIME DATE/ DISPLAY SETTINGS> screen is set to "TOP" or "BOTTOM."**

To release the PASSWORD LOCK • • •

1. (To release the PASSWORD LOCK of levels 1 and 2 • • •)
Press and hold the LOCK button for more than 3 seconds.

- **The <UNLOCK PASSWORD> (levels 1 and 2) screen appears.**



2. Confirm that the cursor is positioned on the left side of level "1" and then press the ENTER button.

- **The first input position is highlighted.**

3. Input the PASSWORD of level 1 by pressing the number buttons.

- **The cursor reappears to the left side of the setting of level 1.**

ⓘ Be sure to input the PASSWORD correctly. When you input the incorrect PASSWORD, repeat steps 2 and 3 to input again.

4. Press the JOG ▲,▼ buttons to select the level "2" and then press the ENTER button.

- **The first input position is highlighted.**

5. Input the PASSWORD of level 2 by pressing the number buttons.

- **The cursor reappears to the left side of the setting of level 2.**

ⓘ When the PASSWORD LOCK of levels 1 and 2 are set and then unlock level 1, the PASSWORD LOCK of level 2 is still active.

ⓘ When the PASSWORD LOCK of levels 1 and 2 are set, you cannot unlock only level 2. Unlock level 1 also.

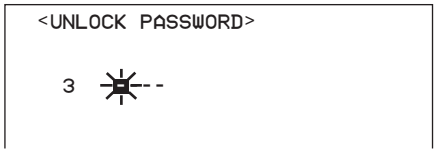
ⓘ Be sure to input the PASSWORD correctly. When you input the incorrect PASSWORD, repeat steps 4 and 5 to input again.

6. Press the JOG ▲,▼ buttons to move the cursor to "EXECUTE" and then press the ENTER button.

- **The normal screen appears.**

7. (To release the PASSWORD LOCK of level 3 • • •)
After following steps 1 to 6 to release the PASSWORD LOCK of levels 1 and 2, press the SET UP button.

- **The <UNLOCK PASSWORD> (level 3) screen appears.**



ⓘ When the PASSWORD LOCK of levels 1, 2, and 3 are set, you cannot unlock only level 3. Unlock levels 1 and 2 also.

8. Input the PASSWORD of level 3 by pressing the number buttons.

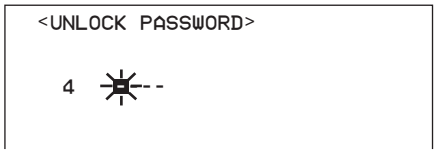
- **The PASSWORD LOCK is released and the normal screen appears.**

ⓘ When the PASSWORD LOCK of levels 1, 2, and 3 are set, the PASSWORD LOCK of level 2 is active when unlocking level 1, and level 3 is active when unlocking levels 1 and 2.

ⓘ Press the LOCK button for more than 3 seconds to return to the normal screen without input PASSWORD.

9. (To release the PASSWORD LOCK of level 4 • • •)
Set "MAIN HDD DATA CLEAR" or "SUB HDD DATA CLEAR" in <INFORMATION/SERVICE> screen.

- **The <UNLOCK PASSWORD> (level 4) screen appears.**



10. Input the PASSWORD of level 4 by pressing the number buttons.

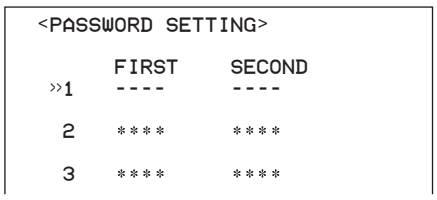
- **The PASSWORD LOCK is released and "MAIN HDD DATA CLEAR" or "SUB HDD DATA CLEAR" screen appears.**

To change the PASSWORD • • •

1. Unlock the PASSWORD of levels 1 to 3.

2-1. (To change the PASSWORD for levels 1 to 3 • • •)
Display the <PASSWORD SETTING> (levels 1 to 3) screen. Press the JOG ▲,▼ buttons to move the cursor to the level to be changed and then press and hold the WARNING RESET button for more than 3 seconds.

- **The PASSWORD in "FIRST" and "SECOND" are cleared and "- - - -" appears.**



2-2. Input the new PASSWORD referring to "To register the PASSWORD • • •."

3-1. (To change the PASSWORD of level 4 • • •)
Display the <PASSWORD> screen. Press the JOG ▲,▼ buttons to move the cursor to "HDD DATA CLEAR" and then press the ENTER button.

- **The <CHANGE PASSWORD> screen appears.**

3-2. Input the PASSWORD of level 4 by pressing the number buttons.

- **The PASSWORD LOCK is released and <PASSWORD SETTING> screen appears.**

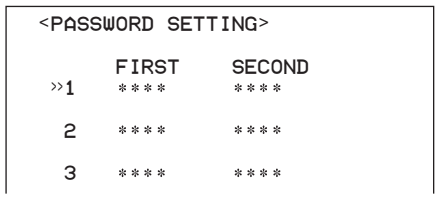
3-3. Press and hold the WARNING RESET button for more than 3 seconds.

- **The PASSWORD in "FIRST" and "SECOND" are cleared and "- - - -" appears.**

3-4. Input the new PASSWORD referring to "To register the PASSWORD • • •."

Changing the lock mode from PASSWORD LOCK to SIMPLE LOCK • • •

1. Unlock the PASSWORD of levels 1 to 3 and display the <PASSWORD SETTING> screen.



2. Confirm that the cursor is positioned on the left side of level 1 and then press and hold the WARNING RESET button for more than 3 seconds.

- **The PASSWORD in "FIRST" and "SECOND" are cleared and "- - - -" appears.**

3. Press the JOG ▲,▼ buttons to move the cursor to level 2 and then press and hold the WARNING RESET button for more than 3 seconds. Repeat this step for level 3.

- **"- - - -" displays for the PASSWORD of all the levels.**

4. Press the CLEAR button or SET UP button.

■ LANGUAGE SELECTION

☞ See page 28.

■ Operation example 1

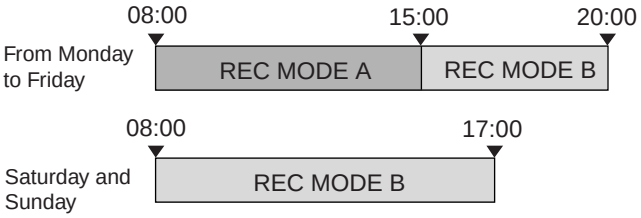
Setting different number of cameras to REC MODE A and B for normal recording to switch cameras depending on the time period and day of the week.

➲ For loading of camera video, ☞ see "Relation of recording operation to the number of cameras and recording interval settings" on page 82.

< Operation >

• REC MODE A (normal recording with all the cameras) is set to Monday to Friday from 08:00 to 15:00, and REC MODE B (normal recording with camera numbers "①" and "③") is set from 15:00 to 20:00.

• On weekends, REC MODE B (normal recording with camera numbers "①" and "③") is set from 08:00 to 17:00.



< Setting >

1) <CAMERA TITLE/MEMO SETTING> screen setting (☞ see pages 34 and 35)

- **All the cameras ("①" to "④"):**
  - **Input a title.**

```
<CAMERA TITLE/MEMO SETTING>
»①      ENTRANCE
 ②      ATM
 ③      EXIT
 ④      COUNTER
 MEMO   ···············

                    CLEAR:BACK
ENTER:CHARACTERS
```

2) <INITIAL SET UP/INFORMATION> screen setting

- **AUDIO RECORDING: "OFF" (☞ see page 48)**

```
<INITIAL SET UP/INFORMATION>
 HDD SETTINGS
»AUDIO RECORDING          OFF
 REAR TERMINAL SETTINGS
 COMMUNICATION PORT SETTINGS
 INFORMATION/SERVICE
```

3) <HDD SETTINGS> screen setting (☞ see page 47)

- **HDD REPEAT REC MAIN: "ON"**

```
<HDD SETTINGS>
»HDD REPEAT REC MAIN       ON
 HDD REPEAT REC SUB       OFF
 HDD REPEAT PLAY          OFF
 IM-CHECK PLAY            OFF
 SEQUENTIAL PLAY          OFF
```

4) <TIMER PROGRAM SETTINGS> screen setting (☞ see pages 44 to 46)

- **SELECTED PATTERN: "P1"**

```
<TIMER PROGRAM SETTINGS>
»SELECTED PATTERN        P1-SET
 HOLIDAY SETTING
 REC MODE A
 REC MODE B
 REC MODE C
 REC MODE D
 ALARM REC DURATION         5S
```

5) <RECORD SETTING A> screen setting (☞ see page 46)

- **All the cameras ("①" to "④"):**
  - **PPS, GRADE: Set the desired interval and picture quality for each camera.**
  - **A-PPS: "------"**

```
<RECORD SETTING A>
NO  PPS     GRADE A-PPS   A-GRADE
»①  3.125P STD   ------ STD
 ②  3.125P STD   ------ STD
 ③  3.125P STD   ------ STD
 ④  3.125P STD   ------ STD

ALARM TYPE              ALARM CH
PRE ALARM REC                OFF

                      CLEAR:BACK
<ESTD REC>      □□D□□H□□M
```

6) <RECORD SETTING B> screen setting (☞ see page 46)

- **Camera numbers "①" and "③" only:**
  - **PPS, GRADE: Set the desired interval and picture quality for each camera.**
  - **A-PPS: "------"**
- **Other cameras:**
  - **PPS, A-PPS: "------"**

```
<RECORD SETTING B>
NO  PPS     GRADE A-PPS   A-GRADE
»①  6.25P  SUPER ------ STD
 ②  ------ STD   ------ STD
 ③  6.25P  SUPER ------ STD
 ④  ------ STD   ------ STD

ALARM TYPE              ALARM CH
PRE ALARM REC                OFF

                      CLEAR:BACK
<ESTD REC>      □□D□□H□□M
```

7) <TIMER PROGRAM> screen setting (☞ see page 44)

- **PROGRAM NO.1 : "SPL," "08:00," "15:00," "A," "OFF."**
- **PROGRAM NO.2 : "SPL," "15:00," "20:00," "B," "OFF."**
- **PROGRAM NO.3 : "SAT," "08:00," "17:00," "B," "OFF."**
- **PROGRAM NO.4 : "SUN," "08:00," "17:00," "B," "OFF."**
- **SPL: "MON - FRI"**

```
<TIMER PROGRAM>                P1
   DW   START END   MODE   MD
»1 SPL  08:00 15:00 A      OFF
 2 SPL  15:00 20:00 B      OFF
 3 SAT  08:00 17:00 B      OFF
 4 SUN  08:00 17:00 B      OFF
 5 ---  --:-- --:-- ----   -
 6 ---  --:-- --:-- ----   -
 7 ---  --:-- --:-- ----   -
 8 ---  --:-- --:-- ----   -

 SPL   MON-FRI
```

When completed with all the settings above and after clearing the menu screen, press both the TIMER ON/OFF buttons. The unit switches to the timer programming mode.

■ Operation example 2

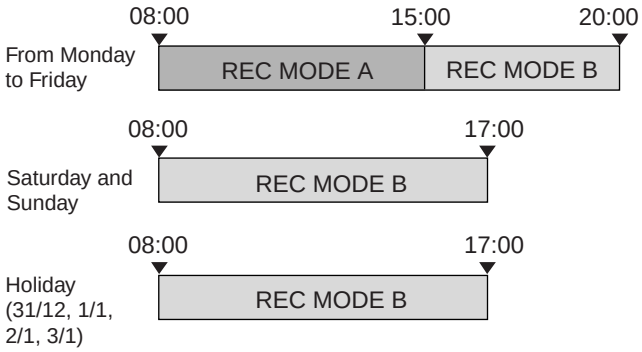
Setting the holiday.

< Operation >

• REC MODE A (normal recording with all the cameras) is set to Monday to Friday from 08:00 to 15:00, and REC MODE B (normal recording with camera numbers "①" and "③") is set from 15:00 to 20:00.

• On weekends, REC MODE B (normal recording with camera numbers "①" and "③") is set from 08:00 to 17:00.

• 31/12, 1/1, 2/1 and 3/1 are set as holidays and REC MODE B is set from 08:00 to 17:00.



< Setting >

1) Set 1) to 3) of "Operation example 1" on the previous page.

2) <TIMER PROGRAM SETTINGS> screen setting (☞ see pages 44 to 46)

- **SELECTED PATTERN: "P2"**
- **HOLIDAY SETTING: 31/12, 01/01, 02/01, 03/01**

```
<TIMER PROGRAM SETTINGS>
»SELECTED PATTERN          P2-SET
 HOLIDAY SETTING
 REC MODE A
 REC MODE B
 REC MODE C
 REC MODE D
 ALARM REC DURATION            5S
```

```
 <HOLIDAY SETTING>
31/12  01/01  02/01  03/01
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--
--/--  --/--  --/--  --/--




DAY/MONTH
```

3) Set 5) and 6) of "Operation example 1."

4) <TIMER PROGRAM> screen setting (☞ see page 44)

- **PROGRAM NO.1 : "SPL," "08:00," "15:00," "A," "OFF."**
- **PROGRAM NO.2 : "SPL," "15:00," "20:00," "B," "OFF."**
- **PROGRAM NO.3 : "SAT," "08:00," "17:00," "B," "OFF."**
- **PROGRAM NO.4 : "SUN," "08:00," "17:00," "B," "OFF."**
- **PROGRAM NO.5 : "HOL," "08:00," "17:00," "B," "OFF."**
- **SPL: "MON - FRI"**

```
<TIMER PROGRAM>                P2
   DW   START END   MODE    MD
»1 SPL  08:00 15:00 A       OFF
 2 SPL  15:00 20:00 B       OFF
 3 SAT  08:00 17:00 B       OFF
 4 SUN  08:00 17:00 B       OFF
 5 HOL  08:00 17:00 B       OFF
 6 ---  --:-- --:-- ----    ---
 7 ---  --:-- --:-- ----    ---
 8 ---  --:-- --:-- ----    ---

 SPL   MON-FRI
```

When completed with all the settings above and after clearing the menu screen, press both the TIMER ON/OFF buttons. The unit switches to the timer programming mode.

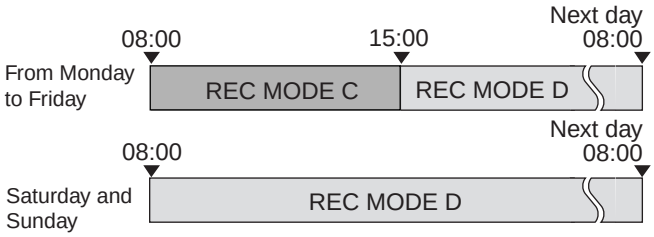
■ Operation example 3

Setting a combination of normal recording, pre-alarm recording, alarm recording and emergency recording.

< Operation >

• REC MODE C (pre-alarm recording, alarm recording and emergency recording, with all the cameras) is set from Monday to Friday from 08:00 to 15:00 and REC MODE D (pre-alarm recording, alarm recording, and emergency recording with camera numbers "①" and "③") is set from 15:00 to 08:00 on the next day.

• On weekends, REC MODE D (pre-alarm recording, alarm recording, and emergency recording with camera numbers "①" and "③") is set from 08:00 to 08:00 on the next day.



< Setting >

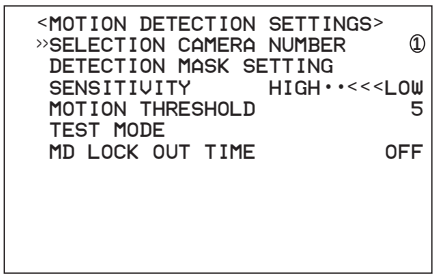
1) Set 1) to 3) of "Operation example 1."

2) <REAR TERMINAL SETTINGS> screen setting (☞ see page 51)

- **EMERGENCY REC DURATION: "20M"**

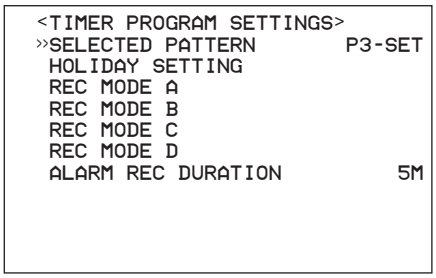
```
<REAR TERMINAL SETTINGS>
 MODE OUT 1                    OFF
 MODE OUT 2                    OFF
 MODE OUT 3                    OFF
 MODE OUT 4                    OFF
 MODE OUT 5                    OFF
 KEY SOUND                      ON
 BUZZER                        OFF
 REMAIN HDD              MAIN-10%
 CALL OUT SETTINGS
»EMERGENCY REC DURATION      20M
```

3) Set each item in the <MOTION DETECTION SETTINGS> screen for all the cameras (☞ see pages 38 to 40).



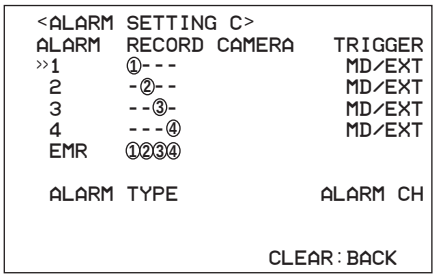
4) <TIMER PROGRAM SETTINGS> screen setting (☞ see pages 44 to 46)

- **SELECTED PATTERN: "P3"**
- **ALARM REC DURATION: "5M"**



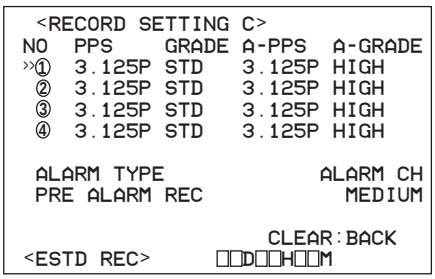
5) <ALARM SETTING C> screen setting (☞ see page 46)

- **All the cameras ("①" to "④"):**
  - **TRIGGER: "MD/EXT"**
  - **EMR: Set all the cameras ("①" to "④").**



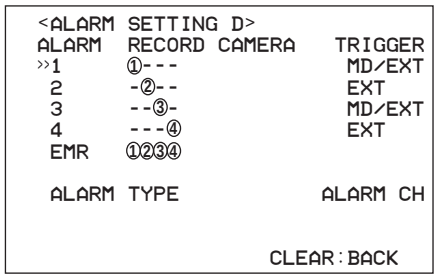
6) <RECORD SETTING C> screen setting (☞ see page 46)

- **All the cameras ("①" to "④"):**
  - **PPS, GRADE, A-PPS, A-GRADE: Set the desired interval and picture quality for each camera.**
  - **ALARM TYPE: "ALARM CH"**
  - **PRE ALARM REC: Set the desired pre-alarm recording time.**



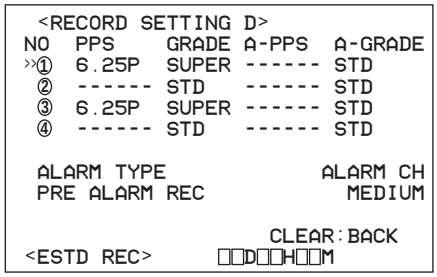
7) <ALARM SETTING D> screen setting (☞ see page 46)

- **Camera numbers "①" and "③" only:**
  - **TRIGGER: "MD/EXT"**



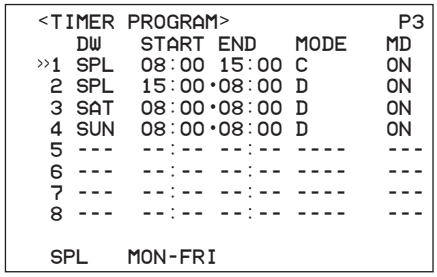
8) <RECORD SETTING D> screen setting (☞ see page 46)

- **Camera numbers "①" and "③" only:**
  - **PPS, GRADE, A-PPS, A-GRADE: Set the desired interval and picture quality for each camera.**
- **Other camera:**
  - **PPS, GRADE: "------"**
  - **ALARM TYPE: "ALARM CH"**
- **PRE ALARM REC: Set the desired pre-alarm recording time.**



9) <TIMER PROGRAM> screen setting (☞ see page 44)

- **PROGRAM NO.1 : "SPL," "08:00," "15:00," "C," "ON."**
- **PROGRAM NO.2 : "SPL," "15:00," "08:00," "D," "ON."**
- **PROGRAM NO.3 : "SAT," "08:00," "08:00," "D," "ON."**
- **PROGRAM NO.4 : "SUN," "08:00," "08:00," "D," "ON."**
- **SPL: "MON - FRI"**

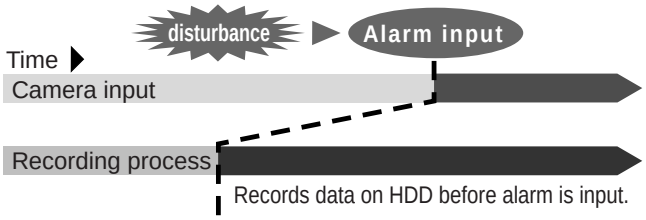


When completed with all the settings above and after clearing the menu screen, press both the TIMER ON/OFF buttons. The unit switches to the timer programming mode.

■ PRE ALARM RECORDINGS

During alarm recording, recording starts a few seconds before the ALARM IN terminal is grounded or motion is detected.

➲ For details concerning pre-alarm recording settings, ☞ see “Recording mode settings A to D for normal recording and alarm recording” on page 46.



Pre-alarm recording:
1) Starts recording before the ALARM IN terminal is ground or motion is detected.

2) Executes only when pre-alarm recording is set in the <RECORD SETTING> screen or <REC MODE A> to <REC MODE D> screen. After the input of an alarm signal, only the cameras set in the <RECORD SETTING> screen and <REC MODE A> to <REC MODE D> screen are used for recording.

➲ Pre-alarm recording and normal recording cannot be executed simultaneously.

➲ The pre-alarm recording time differs depending on the recorded contents. The recording time may also differ depending on the video contents or the timing of the alarm signal input.

■ EMERGENCY RECORDING

When the EMERGENCY terminal is grounded while the MAIN switch on the rear panel and the POWER button on the front panel are both turned ON and during timer recording, emergency recording starts automatically overriding all the other settings.

ⓘ Emergency recording does not perform while the MAIN switch or POWER button is turned OFF or during timer recording standby mode.

➲ For the details concerning emergency recording duration settings, ☞ see page 51.

Emergency recording:
1) Uses all the camera numbers set in “EMR” of the <ALARM SETTING> screen and also set its recording interval in “A-PPS” in the <RECORD SETTING> screen. The recording grade is “SUPER” and the recording interval is the minimum value available for each camera.

2) Used cameras
All the cameras of which “PPS” or “A-PPS” is set to other than “- - - - - -.”

During timer recording, emergency recording uses all the cameras set in the REC MODE A to REC MODE D which is available on that time and those “PPS” or “A-PPS” is set to other than “- - - - - -.”

3) During emergency recording
“ALM” is displayed on the screen in red.

4) Emergency recording is registered in the alarm list and displayed in red.

■ Playing still frames

1. *Press the PAUSE button during playback.*
   - **The unit switches to still frame playback. Press the PAUSE button again or press the PLAY button to resume playback.**

■ Frame-by-frame playback

1. *Press the JOG ▲,▼ buttons during still frame playback.*
   - **JOG ▲ button: Frame-by-frame playback starts in the forward direction.**
   - **JOG ▼ button: Frame-by-frame playback starts in the reverse direction.**
   - **Still frame playback resumes when frame-by-frame playback is stopped.**

■ Reverse playback

1. *Press the REV. P button in the stop mode.*
   - **Playback starts in the reverse direction. Press STOP button to stop playback.**

➲ When reverse playback is performed for the first time after turning the power on, the reverse playback starts from the last recorded video.

■ Speed search

1. *(Forward direction)*

Press the PLAY button during playback to activate forward speed search.

- **Each time the PLAY button is pressed, the forward playback speed changes in the 4 grades (normal → 25 fields/second → 30 MB units → 300 MB units → normal). Speed search stops when pressing the STOP button.**

2. *(Reverse direction)*

Press the REV. P button during reverse playback to activate reverse speed search.

- **Each time the REV. P button is pressed, the reverse playback speed changes in the 4 grades (normal → 25 fields/second → 30 MB units → 300 MB units → normal). Speed search stops when press the STOP button.**

ⓘ Audio cannot be played back during speed search.

ⓘ Once the playback speed is changed, audio is not played back even when returning the playback speed to normal. To playback audio, stop playback and then playback the video again.

■ Monitor display settings and playback operation

• Single screen display: Playbacks at the same interval used in the recording. The update speed of the playback video becomes slower as the number of connected camera during recording increases.

• SPLIT4 screen display: Playbacks at the same interval used in the recording. Each of the display is updated frame by frame.

■ Simultaneous playback during recording

The recorded data can be played back simultaneously during the unit is recording.

ⓘ The playback video may pause temporarily or the sound may be interrupted.

ⓘ Noise may occur on the video during speed search.

➲ Split screen display can be selected individually for recording and playback.

ⓘ The playback cannot be performed while communicating with other device via ETHERNET terminal and viewing the live images on the other device. During this time, “NET” appears on the monitor. When you view the live images on the other device via ETHERNET terminal while playback, the playback stops automatically.

ⓘ The unit gives priority to the recording mode. The playback may be affected by the operational mode (for example, playback speed may become slower).

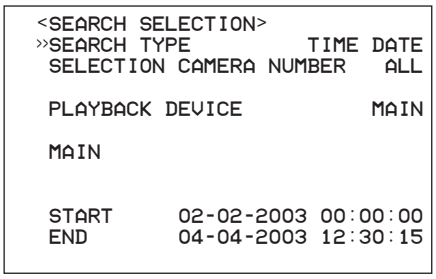
The various search functions of this unit can be used to skip to the desired video.

■ SEARCH SELECTION

The search screen appears when the SEARCH button is pressed. When pressing the SEARCH button again, the <SEARCH SELECTION> screen appears to select the playback device, search type, and the camera number to be searched.

♦ SEARCH TYPE

This item is used to select the search screen to be displayed when pressing the SEARCH button.



Setting (default: “TIME DATE”)

“TIME DATE,” “INDEX,” “ALARM INDEX,” “ALARM SKIP,” “ALARM LIST”

1. Press the SEARCH button twice.

• The search screen appears when the button is pressed once. The <SEARCH SELECTION> screen appears when the button is pressed again.

2. Display the desired setting in “SEARCH TYPE” and determine such setting.

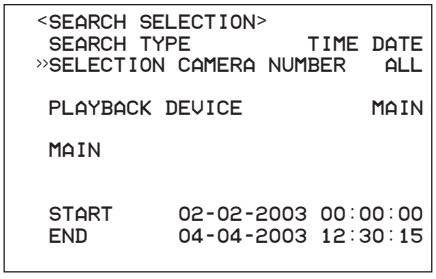
3. Press the CLEAR button or the SEARCH button.

• When pressing the CLEAR button, the search screen set in step 2 appears.

• When pressing the SEARCH button, the display returns to the normal screen.

♦ SELECTION CAMERA NUMBER

This item is used to select the camera number to be searched. “SELECTION CAMERA NUMBER” setting does not appear when “SEARCH TYPE” is set to “INDEX.”



Setting (default: “ALL”)

“ALL,” “①,” “②,” “③,” “④”

“ALL”: Searches for all the camera numbers, “①” through “④,” and displays search results in SPLIT4 screen display.

“①” to “④”: When the search type which can select the camera number is set, the unit searches the specified conditions of the selected camera and displays the search result in the single screen display.

1. Press the SEARCH button twice to display the <SEARCH SELECTION> screen.

2. Display the desired setting in “SELECTION CAMERA NUMBER” and determine such setting.

3. Press the CLEAR button or the SEARCH button.

• When pressing the CLEAR button, the display returns to the search screen.

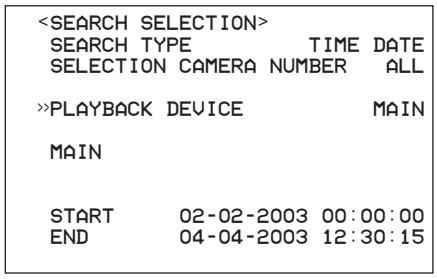
• When pressing the SEARCH button, the display returns to the normal screen.

♦ DATE/TIME

This item is displayed only when “SEARCH TYPE” is set to “ALARM LIST.” Use to narrow down the number of lists to be displayed on the screen during alarm list search (☞ see page 66).

♦ PLAYBACK DEVICE

This item is used to select the HDD to be played back (MAIN or SUB).



Setting (default: “MAIN”)

“MAIN,” “SUB”

➲ The “SUB” setting is added when the “HDD SETTING” in the <INITIALIZATION> screen is set to “PARTITION.”

1. Press the SEARCH button twice to display the <SEARCH SELECTION> screen.

2. Display the desired setting in “PLAYBACK DEVICE” and determine such setting.

3. Press the CLEAR button or the SEARCH button.

• When pressing the CLEAR button, the display returns to the search screen.

• When pressing the SEARCH button, the display returns to the normal screen.

➲ START/END display

Displays the date/time of the recording start/end points of the HDD set in “PLAYBACK DEVICE.” Use this as reference when searching.

■ TIME DATE SEARCH

☞ See pages 26 to 28.

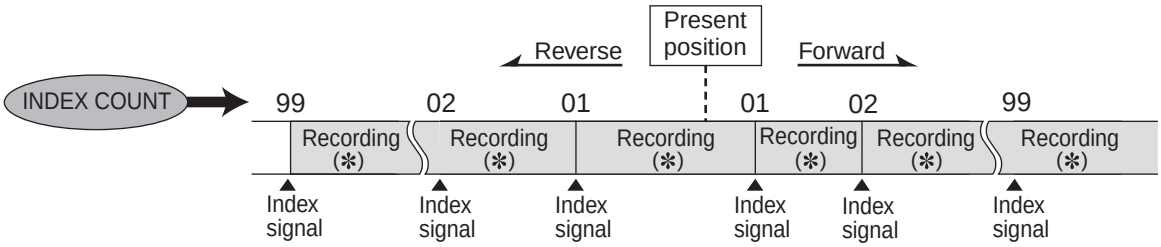
■ INDEX SEARCH/ALARM INDEX SEARCH

Index signals are automatically written to the HDD at the start point of each recording. It is possible to search these signals and start playback from such index point.

There are 2 types of index search:
• <INDEX SEARCH>: Searches the index signal written during normal recording.
• <ALARM INDEX SEARCH>: Searches the index signal written during alarm recording or emergency recording.

Up to 99 index signals can be searched in forward or reverse direction.

How index signals are counted for <INDEX SEARCH> and <ALARM INDEX SEARCH>

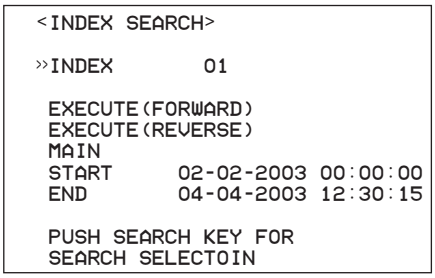


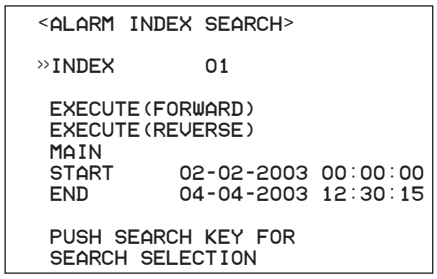
(✻): Normal recording for INDEX SEARCH. Alarm recording or emergency recording for ALARM INDEX SEARCH.

1. Press the SEARCH button.
- **The search screen selected in "SEARCH TYPE" appears.**

➲ "SELECTION CAMERA NUMBER" setting does not appear when "INDEX" is selected.

2. (When the desired search screen is not displayed on the screen • • •) Change the "SEARCH TYPE" setting to "INDEX" or "ALARM INDEX." And then press the CLEAR button to display <INDEX SEARCH> screen or <ALARM INDEX SEARCH> screen.
- **When searching index signals which are written during normal recording, display the <INDEX SEARCH> screen.**
- **When searching index signals which are written during alarm recording or emergency recording, display the <ALARM INDEX SEARCH> screen.**
- **After executing INDEX SEARCH or ALARM INDEX SEARCH:**
  - **For INDEX SEARCH, SPLIT4 screen display is displayed.**
  - **For ALARM INDEX SEARCH, SPLIT4 screen display is displayed when "SELECTION CAMERA NUMBER" is set to "ALL." Single screen display with still frame playback is displayed when selecting the individual camera number.**





➲ The camera number of which the start index signal of the pre-alarm recording is written may differ from the camera number displayed in the alarm list.

3. Display the desired setting in "INDEX" and press the ENTER button.

4. Select "EXECUTE(FORWARD)" or "EXECUTE(REVERSE)" and press the ENTER button.
- **"EXECUTE (FORWARD)": Searches in the forward direction.**
- **"EXECUTE (REVERSE)": Searches in the reverse direction.**

- **To cancel searching, press the SEARCH button twice.**
- **The search is not executed if there is no index signal. To return to the normal screen, press the SEARCH button twice.**

5. Playback the search result.
- **Press the PLAY (,REV. P) or PAUSE button.**

6. To stop playback or still-frame playback, press the STOP button.

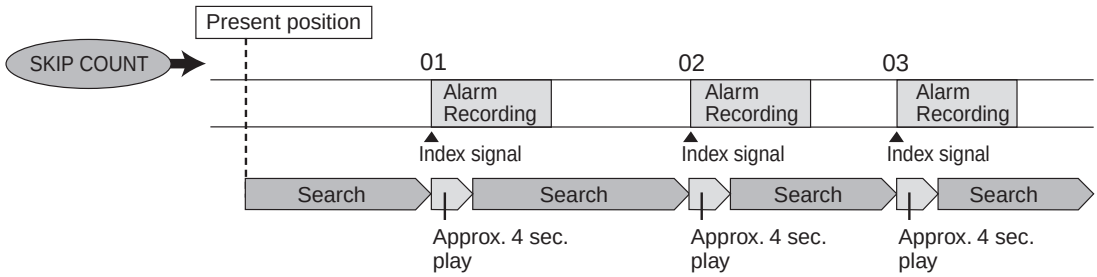
ⓘ During still frame playback, to choose the desired video from the SPLIT4 screen display and display the video of that camera number in the single screen display, press the SEARCH button to clear the search screen first, and then press the SPLIT/SINGLE button and the +, – button.

ⓘ The search may not be performed properly at times depending on the recorded condition of the index signals.

■ ALARM SKIP SEARCH

Searches the point where the index signal of alarm recording is written and plays back approximately 4 seconds where an index signal is written.

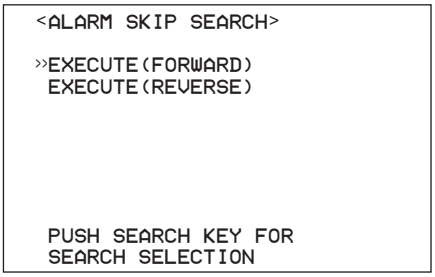
<ALARM SKIP SEARCH> In case of forward direction



1. Press the SEARCH button.
- **The search screen selected in "SEARCH TYPE" appears.**

2. (When the desired search screen is not displayed on the screen • • •) Change the "SEARCH TYPE" setting and then press the CLEAR button to display the "ALARM SKIP SEARCH" screen.

3. Select "EXECUTE(FORWARD)" or "EXECUTE(REVERSE)" and determine such setting.
- **"EXECUTE(FORWARD)": Searches in the forward direction.**
- **"EXECUTE(REVERSE)": Searches in the reverse direction.**



- **To cancel searching, press the SEARCH button twice.**
- **The search result of the alarm skip search is displayed in the SPLIT4 screen display regardless of "SELECTION CAMERA NUMBER" setting.**
- **To return to the normal screen, press the SEARCH button twice.**

ⓘ When executing the alarm skip search in the SPLIT4 screen display, to choose the desired video from the SPLIT4 screen display and display the video of that camera number in the single screen display, press the SPLIT/SINGLE button and then press the +, – button.

4. Press the PAUSE button and then press the PLAY button when the desired video is displayed.

5. To stop ALARM SKIP SEARCH, press the STOP button.

ⓘ When executing the alarm skip search in the reverse direction with index signals of less than 4 seconds, that portion may be played back repeatedly. In this case, press the STOP button to stop the search and execute alarm skip search in the reverse direction again after the particular portion has been passed using reverse playback, etc.

ⓘ The search may not be performed properly at times depending on the recorded condition of the index signals.

■ ALARM LIST SEARCH

This unit stores the start times of alarm recording and emergency recording in the alarm list when such recording is started. It is possible to perform the index search for the desired time (or the closest time) from the alarm recording (or emergency recording) start times listed in the alarm list.

➲ Up to 10,000 alarm recording (emergency recording) start times are stored and displayed.

➲ In the alarm list, items for the ALARM IN terminal on the rear panel grounded are indicated in white, items that were detected with motion are indicated in green, and items for the EMERGENCY terminal grounded are indicated in red.

➲ To clear the alarm list, erase the data by <MAIN HDD DATA CLEAR> screen while the "HDD SETTING" in <INITIALIZATION> screen is set to "NORMAL" or "MIRRORING." Beware that executing it erases all the data of HDD contained the video data. Alarm recording then will be stored again from 00001.

1. Press the SEARCH button.

- **The search screen selected in "SEARCH TYPE" appears.**

```
<SEARCH SELECTION>
»SEARCH TYPE          ALARM LIST
 SELECTION CAMERA NUMBER   ALL
 DATE/TIME **-**-**** **:**:**
 PLAYBACK DEVICE          MAIN

 MAIN


 START     02-02-2003 00:00:00
 END       04-04-2003 12:30:15
```

➲ The alarm list may take time to be displayed completely when there are many list items or the HDD has been added.

2. (When the desired search screen is not displayed on the screen • • •)
Change the "SEARCH TYPE" setting and then press the CLEAR button to display the "ALARM LIST SEARCH" screen.

- **To display the emergency recording start time in the alarm list, set "SELECTION CAMERA NUMBER" in the <SEARCH SELECTION> screen to "ALL."**
  "EMR" on the position of the camera number in the alarm list indicates the emergency recording.

```
<ALARM LIST SEARCH>
»00004 01-01-2003 00:00:04 ② 1
 00003 01-01-2003 00:00:03 EMR
 00002 01-01-2003 00:00:02 ① 1
 00001 01-01-2003 00:00:01 EMR
```

ⓘ When executing alarm list search while the "HDD SETTING" in the <INITIALIZATION> screen is set to "PARTITION," set "PLAYBACK DEVICE" to "SUB."

3. Select the desired alarm list number.

- **▲ button: Selects the next number.**
- **▼ button: Selects the previous number.**
- **▶ button: Displays the page with date prior to the date of the currently opened page.**
- **◀ button: Displays the page with date newer than the date of the currently opened page.**
- **To cancel searching, press the SEARCH button twice.**

ⓘ The camera number of which the start index signal of the pre-alarm recording is written may differ from the camera number displayed in the alarm list.

ⓘ When setting "HDD REPEAT REC MAIN" to "OFF" or "STANDBY," or "HDD REPEAT REC SUB" to "OFF," and there is an alarm recording (or emergency recording) at the end of the HDD, that recording may not be stored in the alarm list and that number may be missed and not be displayed.

ⓘ The alarm list numbers may become out of sequence.

➲ When an alarm recording (or emergency recording) is started while displaying the <ALARM LIST SEARCH> screen, exit the <ALARM LIST SEARCH> screen and then display it again. The new item will be added to the list.

➲ When using "DATE/TIME" in the <SEARCH SELECTION> screen, the number of list items displayed on the screen can be narrowed down.

1. Press the SEARCH button to display the <SEARCH SELECTION> screen.

2. Set the desired date and time to be searched in "DATE/TIME" and determine such setting.

3. Press the CLEAR button once to display the narrowed-down list.

4. Select the desired alarm list number, and then press the ENTER button to determine such setting.

- **To cancel searching, press the SEARCH button twice.**
- **The search result of the alarm list search is displayed in the single screen display in still-frame playback regardless of "SELECTION CAMERA NUMBER" setting.**

5. Playback the search result.

- **Press either the PLAY (, REV. P) or PAUSE button.**

6. To stop playback or still-frame playback, press the STOP button.

■ START/END SEARCH

It is possible to search the recording start/end point of the playback device selected in <TIME DATE SEARCH>, <INDEX SEARCH>, and <ALARM INDEX SEARCH>.

1. Press the SEARCH button.
- **The search screen selected in "SEARCH TYPE" appears.**

2-1. (To playback the oldest recording • • •)
Select "START" and press the ENTER button.

2-2. (To playback the latest recording • • •)
Select "END" and press the ENTER button.
- **After executing START/END SEARCH:**
  - **For TIME DATE SEARCH and ALARM INDEX SEARCH, SPLIT4 screen display is displayed when "SELECTION CAMERA NUMBER" is set to "ALL." Single screen display in still frame playback is displayed when selecting the individual camera number.**
  - **For INDEX SEARCH, SPLIT4 screen display is displayed.**

3. Playback the search result.
- **Press the PLAY (, REV. P) or the PAUSE button.**

4. To stop playback or still-frame playback, press the STOP button.

ⓘ During still frame playback, to choose the desired video from the SPLIT4 screen display and display the video of that camera number in the single screen display, press the SEARCH button to clear the search screen first, and then press the SPLIT/SINGLE button and the +, – button.

■ Power failure compensation circuit

The unit is equipped with an internalized power failure compensation circuit. When the unit has been charged for 48 hours (full), the date, time, timer record settings, and menu settings are kept up to 1 month without power. The accuracy of the time will decline if the power plug is not connected to the wall outlet for extensive period. In this case, it is recommended to check the current time setting.

■ Power failure reset recording

If there is a power failure during recording or when turning OFF the MAIN switch, the recording will resume after the power is restored. If there is a power failure during timer recording, the recording will resume after the power is restored when within the set time period of the timer. For alarm recording, recording will stop even within the set recording time.

➲ The playback video at the start position where recording is resumed after a power failure may be distorted and the search function may not operate properly.

■ Log function for when power failure occurs while the unit is in operation or the MAIN switch on the rear panel is turned OFF

In the event of power failure or the MAIN switch on the rear panel is turned OFF, up to 1000 items (including the time of failure and warning log displays as well as other warning items) are saved in the <WARNING LOG LIST>
(☞ see page 54), and are displayed in red on the screen.

■ RESET button

When pressing the RESET button on the rear panel with a ballpoint pen, etc., the unit is reset and the power turns off.

➲ The menu settings and the present time are kept even when resetting the unit.

■ COVERT CAMERA SETTING

This item is used to set the video of the specified camera number not to be displayed regardless of the presence of video signals.

```
<COVERT CAMERA SETTING>
NUMBER          DISPLAY
›①                ON
 ②                ON
 ③                ON
 ④                ON
 ALARM DISPLAY    OFF
```

Setting (default: “ON”)
“ON,” “OFF”

➲ When COVERT CAMERA SETTING activating and the playback video is interrupted such as camera trouble, warning indicator is not appear on the screen. If “WARNING” is set in BUZZER setting, the BUZZER sounds and the unit registers this error in the WARNING LOG LIST and output a CALL OUT signal.

➲ When “COVERT CAMERA SETTING” is set to “OFF” for a camera set for recording, recording is performed without displaying the video on the screen.

ⓘ When “COVERT CAMERA SETTING” is set to “OFF,” the playback video of the corresponded camera number is not displayed. Furthermore, the operation mode display and alarm display do not function.

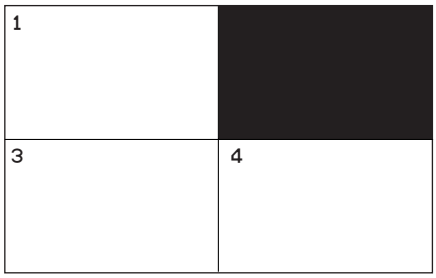
1. Press the SET UP button and select <SETTINGS>. While the <MPX DISPLAY SETTINGS> screen is displayed, press and hold the WARNING RESET button for more than 3 seconds.
- **The <COVERT CAMERA SETTING> screen appears.**

2. Press the JOG ▲,▼ buttons to select the camera number to be set and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

3. Press the JOG ▲,▼ buttons to select “OFF” and then press the ENTER button.
- **The setting item is determined and flashing stops.**
- **The screen of the set camera number becomes black.**

4. To continue with setting for other camera numbers, repeat steps 2 and 3.

5. When completed with all the settings, press the CLEAR button or the SET UP button.
- **The screen of the camera number screen set with “OFF” in “COVERT CAMERA SETTING” becomes black.**



♦ ALARM DISPLAY

This item is used to display the video with alarm signal in the single screen display when an alarm signal is input. If another alarm signal is input during alarm recording, the camera video with the latest alarm signal appears in the single screen display. When alarm recording is completed, the screen returns to the previous display.

Setting (default: “OFF”)
“OFF,” “ON”

1. Press the SET UP button and select <SETTINGS>. While the <MPX DISPLAY SETTINGS> screen is displayed, press and hold the WARNING RESET button for more than 3 seconds.
- **The <COVERT CAMERA SETTING> screen appears.**

2. Press the JOG ▲,▼ buttons to select “ALARM DISPLAY” and then press the ENTER button.
- **The background of the setting item turns red and flashes.**

3. Press the JOG ▲,▼ buttons to select “ON” and then press the ENTER button.
- **The setting item is determined and flashing stops.**

4. Press the CLEAR button or the SET UP button.

■ HDD SETTING

On this unit, you can select “MIRRORING” or “PARTITION” for the HDD recording mode (☞ see page 21).

Setting (default: “NORMAL”)
“NORMAL,” “MIRRORING,” “PARTITION”

♦ MIRRORING

This item is used to record the same data on 2 HDDs of the same capacity in order to reduce the risk of data loss due to an HDD crash.

1. Turn ON the MAIN switch on the rear panel, and wait until the ACCESS indicator turns off. Make sure that the POWER button on the front panel is turned off. While holding down the JOG ▶ button, press the POWER button on the front panel.

- **The <INITIALIZATION> screen appears.**

```
<INITIALIZATION>
»HDD SETTING              NORMAL

 BOOT UP DELAY              30S

 POWER OFF
 INITIALIZATION



ALL DATA WILL BE ERASED
WHEN PROCEED INITIALIZATION
```

2. Press the JOG ▲,▼ buttons to move the cursor to “HDD SETTING” and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

3. Press the JOG ▲,▼ buttons to display “MIRRORING” and then press the ENTER button.

- **The setting item is determined and flashing stops.**

```
<INITIALIZATION>
»HDD SETTING            MIRRORING

 BOOT UP DELAY              30S

 POWER OFF
 INITIALIZATION



ALL DATA WILL BE ERASED
WHEN PROCEED INITIALIZATION
```

4. Select “INITIALIZATION” by pressing the JOG ▲,▼ buttons and then press the ENTER button.

- **The setting is determined, and initialization is executed.**

ⓘ Be sure that all the data in the HDD is erased when executing initialization.

ⓘ While MIRRORING is performed, you cannot set GRADE or A-GRADE in <RECORD SETTING> screen to “SUPER.”

ⓘ To perform MIRRORING, attach the HDDs of the same capacity and the same model name.

ⓘ To exit <INITIALIZATION> screen without setting “HDD SETTING,” select “POWER OFF.”

Points to notice concerning MIRRORING

• When execute “MAIN HDD DATA CLEAR” while MIRRORING function is in operation, all the data in both HDDs are erased.

• When failure occurs to HDD or MIRROR, the unit distinguishes the 2 HDDs and registers the failure in the <WARNING LOG LIST>.

• When failure occurs to either HDD or MIRROR, the “MIRROR” warning is displayed and the operable HDD continues to record. Press and hold the WARNING RESET button for more than 3 seconds to reset the “MIRROR” warning.

• The “MIRROR” warning is displayed every time the unit is booted-up until the faulty HDD is replaced.

• When the faulty HDD is replaced with the operable HDD, the following screen appears. To copy the contents of the HDD, select “RECONSTRUCTION” and press the ENTER button.

```
<HDD RECONSTRUCTION>

A: HDD(120GB)
B: HDD(120GB)



 POWER OFF
»RECONSTRUCTION
DATA WILL BE SYNCHRONIZED
IT MAY TAKE SEVERAL HOURS
```

The following screen appears while copying. When the copy is completed, the power turns on.

```
SETTING UP...

SYNCHRONIZING...
```

Copying the data of 240 GB HDD takes more than 10 hours. During this time, normal operations such as recording and playback cannot be performed.

• When the failure occurs to HDD and MIRROR at the same time, the data cannot be restored.

• Ask at place of purchase about data restoration when repairing or replacing a faulty HDD.

♦ PARTITION/PARTITION SIZE

This item is used to set an independent partition in HDD as sub-device capacity for alarm recording. In the MAIN HDD, normal recording and alarm recording are stored.

1. Turn ON the MAIN switch on the rear panel, and wait until the ACCESS indicator turns off. Make sure that the POWER button on the front panel is turned off. While holding down the JOG ▶ button, press the POWER button on the front panel.

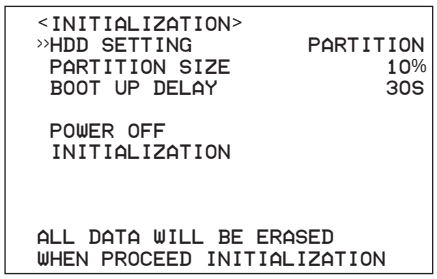
- **The <INITIALIZATION> screen apprears.**

2. Press the JOG ▲,▼ buttons to move the cursor to "HDD SETTING" and then press the ENTER button.

- **The background of the setting item turns red and flashes.**

3. Press the JOG ▲,▼ buttons to display "PARTITION" and then press the ENTER button.

- **The setting item is determined and flashing stops.**
- **The "PARTITION SIZE" setting appears in the <INITIALIZATION> screen.**

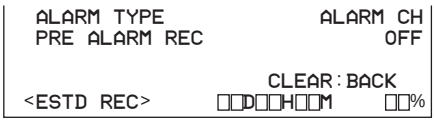


4. Press the JOG ▲,▼ buttons to move the cursor to "PARTITION SIZE" and then press the ENTER button.

Setting of "PARTITION SIZE" (default: 10%)
10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%

➲ The area for normal recording is referred to as "MAIN," and area for alarm recording (PARTITION area) is referred to as "SUB."

ⓘ The area of MAIN HDD set in "PARTITION" is displayed with the percentage (%) and the recordable time of that storage area is displayed in "<ESTD REC>."



5. Press the JOG ▲,▼ buttons to display the desired device capacity and then press the ENTER button.

- **The setting item is detemined.**

6. Select "INITIALIZATION" by pressing the JOG ▲,▼ buttons and then press the ENTER button.

- **The setting is determined, and initialization is executed.**

ⓘ Be sure that all the data in the HDD is erased when executing initialization.

ⓘ While PARTITION is performed, "25P" cannot be set for PPS or A-PPS, and "SUPER" cannot be set for GRADE or A-GRADE in <RECORD SETTING> screen.

ⓘ To exit <INITIALIZATION> screen without setting "HDD SETTING," select "POWER OFF."

Points to notice concerning PARTITION

• Playback, search, information display, REMAIN HDD, MODE OUT, CALL OUT, and data erase functions are performed independently for "MAIN" and "SUB."

• When "HDD REPEAT REC SUB" is set to "OFF," and all the memory in SUB HDD is used, the recording stops. Switch "HDD REPEAT REC SUB" to "ON" or erase data in SUB HDD to restart recording.

• When setting "ALARM CH" and an alarm signal is input to a camera number that is not set for normal recording, pre-alarm recording may not be performed.

• While PARTITION is performed, the number registered in alarm list is not cleared even when clearing the data of HDD MAIN or SUB. When an alarm is input after clearing the HDD, that alarm is numbered as the next one of the last input number.

■ Communications by Web Browser

This unit can communicate with a PC via Web browser. Live and pre-recorded images can be viewed from this mode.

♦ The personal computer product requirements

• OS: Microsoft Windows 98SE, Windows 2000, Windows ME or Windows XP.

• CPU: IBM PC/AT compatible with an Intel Pentium series processor of at least 500 MHz.

• RAM: 256 MB or more.

• Hard disk drive: System drive with unused space of at least 200 MB.

• Web Browser Soft: Microsoft Internet Explorer 5.01SP2 or later.

• Display device: XGA (1024 pixels x 768 pixels) or higher.

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(The official name of Windows is Microsoft Windows Operating System.)
All other company and product names appearing herein are the property of their respective owners.

• Windows 98SE is an abbreviation of Microsoft Windows 98 Second Edition.

• Windows 2000 is an abbreviation of Microsoft Windows 2000 Professional.

• Windows Me is an abbreviation of Microsoft Windows Millennium Edition.

• Windows XP is an abbreviation of Microsoft Windows XP Home Edition/Professional.

ⓘ The product requirement described above cannot guarantee operations in all environments.

ⓘ Lack of compatibility between Web functions and the PC peripheral driver may, in rare instances, result in abnormal operation. If this happens, upgrade to the newest version of Internet Explorer and try again.

♦ Connections

• When making a direct connection between this unit and a personal computer (hereinafter PC), use a cross cable and when making a connection through a HUB, use a straight cable.

• The duplex mode is half duplex.

• Refer to the PC instruction manual for instructions on how to set the Web settings on the PC.

♦ AUTHENTICATION

Start up the Microsoft Internet Explorer and log in.

1. Start up the Microsoft Internet Explorer and enter the IP address of this unit.

- **The "[Authentication]" screen appears.**

2-1. (When logging in • • •)
*First, enter the "userID" and then enter the "password." When shipped from the factory, the userID for the full-rights user is "**root**," and the password is "**admin000**," the userID for the live user is "**guest**" and the password is "**guest**." Lower case only.*

ⓘ More than one user can log in simultaneously using the same userID and password.

ⓘ There are restrictions due to authorization. The maximum number of users that can be connected at the same time is 10.

2-2. Select "log in" and then left-click or press ENTER.

- **The "Welcome" screen appears.**

3-1. (If you make an error in entering the userID or password • • •)

- **The "[Rejection]" screen appears.**

3-2. Select "[Back to Authentication]" and either left-click or press ENTER.

- **The "[Authentication]" screen appears.**

3-3. Follow the steps in step 2-1 and enter the correct "userID" and "password."

4-1. (If you do not want to log in • • •)
Select "If you don't want to log in, click here to exit." and left-click.

4-2. The message "SessionID removed in recorder & browser. Please shut this Web Browser down to clear of your browser's cache." displays. Close the Web Browser.

5-1. (To change password • • •)
The password can be changed in the "[Authentication]" screen only by the user who has the authorization to change a password. Follow the instructions in the menu and enter the present "userID" and "password."

5-2. Enter the new password in "new password:" and again in "retype new password:."

ⓘ The number of characters that can be used in registering a password is 16. Both alphabet letters and numbers can be used with a distinction made between upper and lower case. You cannot use spaces.

5-3. To change into a new password, select "change" and left-click or press ENTER. To stop the change, select "clear," and left-click or press ENTER.

♦ Welcome

This is screen for selecting "live monitor" for live images or "playback" for pre-recorded image for display. User maintenance for setting user authorization can be configured along with "log out" for ending a job, or "change log in user" for marking a change to the logged in user.

ⓘ Depending on what the user's authorization, there are certain menus that cannot be selected.

ⓘ If a request is made for a live picture during playback this unit playback will be stopped.

ⓘ The user's sessionID (connection data) will be lost in 5 minutes from the final operation that includes image retrievals. When the data demand from client PC stops 5 minutes or more, no other operations can be made after that so close the browser and then log in again.

ⓘ If this unit's MAIN switch is "OFF," live and recorded images cannot be retrieved.

1. Select the desired "Menu" and left-click.

• Live monitor

Retrieves live images and displays the images on the PC screen.

1. Select "live monitor" and left-click.

- **The "live monitor" screen appears.**

ⓘ When image acquisition is tried for the first time with the Web browser of a personal computer, a message as shown below will be displayed. Please click "Yes."

Security Warning
Do you want to install and run "DNV25_OCX" signed on 24/02/2003 15:29 and distributed by:
Mitsubishi Electric Corporation
Publisher authenticity verified by VeriSign Class 3 Code Signing 2001-4 CA
Caution: Mitsubishi Electric Corporation asserts that this content is safe. You should only install/view this content if you trust Mitsubishi Electric Corporation to make that assertion.
Always trust content from Mitsubishi Electric Corporation
Yes
No
More Info

<Function description>

STOP	:	Stops the retrieval of an image.
GO	:	Starts (or restarts) the retrieval of an image.
Display	:	For selecting either the display or non-display of a camera number.
Layout	:	For selecting from the 2 types of display patterns. (default: SPLIT4 screen)
Camera	:	Selects the camera number that you want to display and check.
Size	:	Selects one of 7 patterns for the screen size: x2, x1.5, x1, x2/3, x1/2, x1/3, x1/4.
Transfer Rate	:	Selects one of 5 stages from “Lo” to “Hi” for image retrieval speed. (default: middle)
Save Layout	:	The layout of the screen display is registered to “Local PC” and “Recorder.”
Back to [Welcome]	:	Returns to the “Welcome” menu.
[log out]	:	For logging out.

ⓘ The sequence in which camera numbers have been selected is displayed from the top left.

ⓘ The screen size regulated by “Size” is applied to the display field at the farthest upper left point in the screen layout.

ⓘ Setting “Transfer Rate” too far on “Hi” may present obstacles to PC operation as determined by the performance of the PC you are using. Please set it to the appropriate rate to the image retrieval speed of your machine.

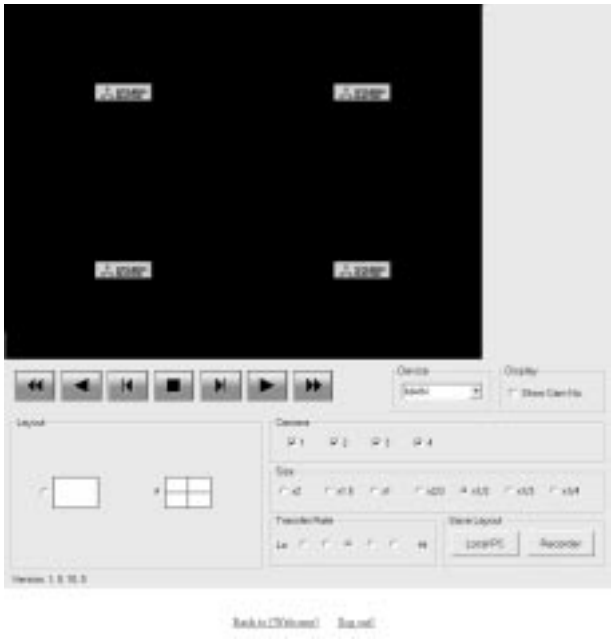
ⓘ Depending on the network capacity and the load conditions, the transfer rate may not rise.

ⓘ Only a user who has the authorization for “Change Password” can store screen layouts in the “Recorder” side using “Save Layout.” If the user who has authorization for “Change Password” stores screen layouts in both “Local PC” and “Recorder,” the information for “Local PC” is given priority. When storing layouts in “Local PC,” only one layout can be stored for one PC, even if users are different. To delete layouts that are stored in “Local PC,” delete the “Cookies” in the browser.

- **Playback**

Retrieves, plays back, and searches for images that have been recorded by this unit.

1. *Select “playback” and left-click.*
   - **The “playback” screen appears.**



2. *Press the PLAY button to start playback.*

<Function description>

▶ : Press to start playback.

⏩ : Press to start speed search in the forward direction at speeds of x2, x4, x8 and x16.

⏭ : Press to frame-by frame playback in the forward direction.

◀ : Press to start reverse playback.

◀◀ : Press to start speed searches in the reverse direction at speeds of x2, x4, x8 and x16.

|◀ : Press to frame-by-frame playback in the reverse direction.

■ : During playback or searching, press to stop playback for still frame.

Device : Selects the HDD for playback and search. (default: MAIN) SUB when this unit is partitioned.

• The following search functions can be selected in single-screen display.

The date and time and the camera number for the image acquired are displayed in “Image Information.” Clicking “Save Image” stores the picture that is still (frozen) displayed in the PC in bit map format.

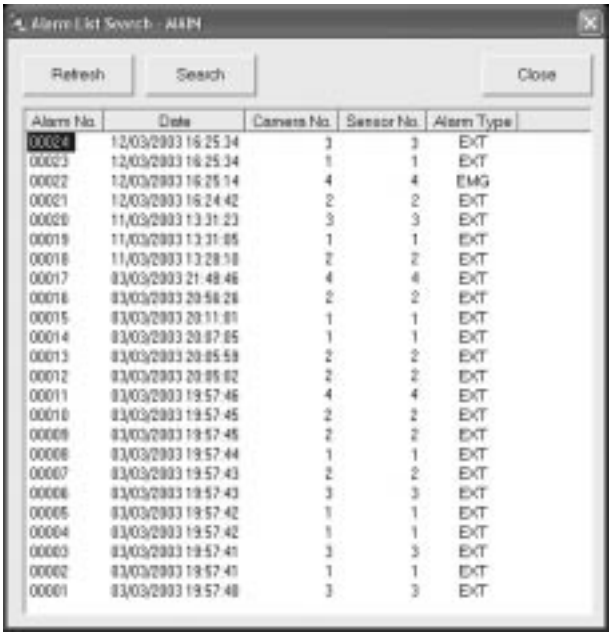
ⓘ The function for searching for recorded image data is effective only when the single-screen display has been selected in the “playback” menu. The function cannot operate during image data playback so to make a search of any type first stop the playback.

- **Time Search**

Select the date and time and click “Search.”

- **Alarm Search**

Click “Alarm List” and the “Alarm List Search - MAIN” screen will appear in the sub-screen. Select the “Alarm No.” desired, and then click “Search.”



Click “Refresh” to re-acquire the “Alarm List,” and click “Close” to hide the “Alarm List Search - MAIN” menu.

- **Index Search**

Click “Prev” for an index search in the reverse direction and click “Next” for an index search in the forward direction.

- **User maintenance**

This is the screen for changing the settings for registered user authorization and for deleting a registration. It can also be used for registering new users.

1. Select “user maintenance” and left-click.

- **The “[Registration]” screen appears.**

2-1. (To change registered user settings • • •)
Select the userID for changing the settings in the “Review & Change user-attribute” settings.

- **Select the items that you want to change.**

<User authorization>

Live Monitor:
Allows acquisition of live images. It is a mandatory to register.

Play Mode:
Allows acquisition of recorded images. Playmode, control from one user.

All Camera:
Allows the acquisition of images from a covert camera.

Change Password:
Allows the changing of user's password. Moreover, a screen layout can be saved to this unit.

Registration:
Allows the viewing and editing of user registration information.

ⓘ Certain items cannot be selected depending on what the user authorization is.

ⓘ "Registration" authorization can be used by only one user. From the time that a user logs in until that user logs out and gives up authorization, any other user that logs in is regarded as a user who does not have "Registration" authority.

ⓘ "Play Mode" authorization can only be used by one user. From the time that a user logs in until that user logs out and gives up authorization, any other user that logs in is regarded as a user who does not have "Play Mode" authority.

2-2. (To change settings • • •)
Select "change" and left-click. The "[Change Confirmation]" screen appears.

2-3. If you want to make the change, left-click "change." If you want to cancel a change, left-click "cancel."

2-4. (When you have selected "change" • • •)
The "[User's Attribute Changed]" screen appears, so then left-click "Back to [Registration]."
- **The screen returns to the "[Registration]" screen.**

2-5. (When you have selected "cancel" • • •)
- **The return will be made to the "[Registration]" screen.**

3-1. (When you have deleted a registered user • • •)
Left-click on "remove" in the userID that you want to delete in "Review & Change user-attribute."
- **The "[Remove confirmation]" screen appears.**

3-2. If you want to delete it, left-click "remove." If you don't want to delete it, left-click "cancel."

3-3. (If you have selected "remove" • • •)
The "[User Removed]" screen appears, so left-click "Back to [Registration]."
- **The screen returns to the "[Registration]" screen.**

3-4. (If you have selected "cancel" • • •)
- **The screen returns to the "[Registration]" screen.**

4-1. (To register a new user • • •)
Enter the new userID and new password in "Register new user."

4-2. Refer to step 2-1, select the "access auth." desired and check it.

ⓘ A userID with the same name cannot be registered. The maximum number of characters that can be used in registering a password is 16. Both alphabet letters and numbers can be used with a distinction made between upper and lower case. You cannot use spaces.

4-3. If you want to make a new registration, left-click "register." If you want to cancel a new registration, left-click "clear."

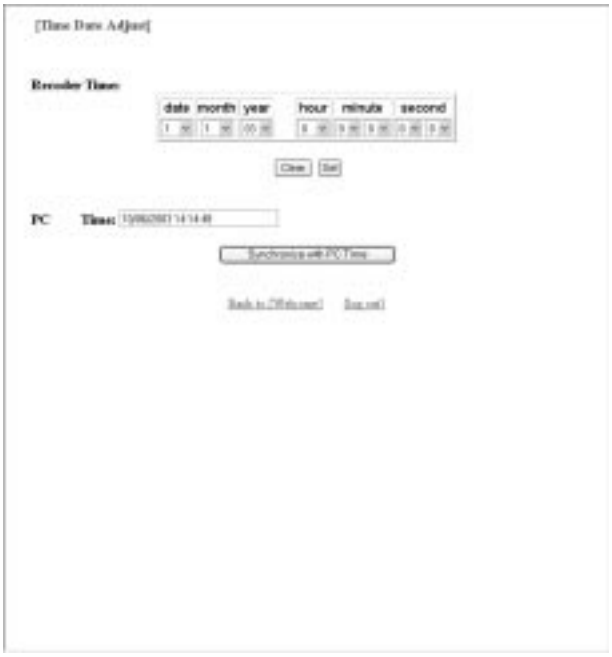
4-4. (If you have selected "Register" • • •)
It is added to "Review & Change user-attribute."

4-5. (Selecting "clear" • • •)
Clears the specified contents.

- **Time date adjust**

This is the screen for setting the clock of the unit via PC.

1. Select "time date adjust" and left-click.
- **The "[Time Date Adjust]" screen appears.**



2. (When setting the clock using "Recorder Time" • • •)
Set "date", "month", "year", "hour", "minute", and "second" in "Recorder Time" to the desired time, and then click "Set."
- **The confirmation screen appears.**
- **When you click "Clear" without clicking "Set," the setting returns to the previous setting.**

(When setting the clock using "Synchronized with PC Time" • • •)
When you want the clock of this unit to be synchronized with the PC clock, click "Synchronized with PC time."
- **The clock of the unit is set to the time displayed in "PC Time" and the confirmation screen appears.**

3. Confirm that the desired time is set.

- **Log out**

In this screen, assign “log out” settings to end the job.

1. Select “log out” and left-click.
- **The “[log out]” screen appears.**

2. Close the Web Browser.

ⓘ If the browser is closed without correctly operating the log out, the user’s sessionID will be saved for 5 minutes. If the Log in is made with the same userID within that 5 minutes, operation limits may take effect.

- **Change log in user**

This screen is for changing the logged in user.

1. Select “Change log in user” and left-click.
- **The “[Authentication]” menu appears.**

2-1. (To change the logged in user • • •)
In the “Log in (or log in as a different user):” settings, execute step 2-1 and 2-2 in “✦ AUTHENTICATION” and change the logged in user.
- **The logged in user is changed and the “Welcome” screen appears.**

2-2. (If the log in is made without changing the user • • •)
Select “Back to [Welcome] as Current User” and left-click.
- **The logged in user remains as is and the “Welcome” screen appears.**

2-3. (To log out • • •)
Select “If You don’t want to log in, click here to exit [log out]” and left-click.

Recording time table

■ Continuous recording time table

♦ HDD continuous recording time (for 240 GB drive)

Displays the estimated recordable time (when recording on a 240 GB (4R120L0 120 GB x 2) HDD).

ⓘ The following table shows estimated recordable time when operating with one camera and the recording interval is set at a constant PPS rate given at the top of the column.

• Without Audio recording

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P	NUMBER OF RECORDING FIELD
SUPER	2d05h	4d10h	6d15h	8d20h	11d01h	13d06h	17d17h	22d03h	55d08h	110d16h	221d08h	442d17h	4,850,000
HIGH	2d23h	5d22h	8d21h	11d20h	14d19h	17d18h	23d16h	29d15h	74d02h	148d04h	296d08h	592d16h	6,470,000
STD	4d23h	9d23h	14d23h	19d23h	24d23h	29d23h	39d23h	49d23h	124d23h	249d22h	499d20h	999d17h	10,870,000
BASIC	6d22h	13d20h	20d18h	27d16h	34d15h	41d13h	55d09h	69d06h	173d03h	346d07h	692d15h	1385d07h	15,030,000
LONG	14d23h	29d22h	44d21h	59d20h	74d19h	89d18h	119d16h	149d14h	373d23h	747d23h	1495d23h	2991d23h	32,390,000

• With Audio recording <Audio recording using 12.8KHz PCM sampling is possible.>

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P
SUPER	2d05h	4d10h	6d15h	8d10h	10d12h	12d15h	16d20h	20d00h	44d18h	73d17h	221d08h	442d17h
HIGH	2d23h	5d17h	8d13h	11d10h	13d17h	16d11h	21d03h	26d10h	55d08h	84d06h	296d08h	592d16h
STD	4d21h	9d13h	14d00h	18d06h	22d07h	26d03h	33d03h	40d08h	76d18h	110d16h	499d20h	999d17h
BASIC	6d17h	12d23h	18d20h	24d06h	29d06h	34d11h	43d09h	51d01h	92d19h	126d17h	692d15h	1385d07h
LONG	13d17h	26d01h	36d12h	46d03h	54d10h	62d02h	75d02h	85d07h	130d07h	158d21h	1495h23h	2991d23h

d: day, h: hour

ⓘ While MIRRORING is performed, coutinuous recording time (with/without audio recording) is half of the time described on the table above.

ⓘ Continuous recordable time and the estimated time displayed on the menu screen is the continuous recordable time when operating this unit and is not the warranty period of the product. Furthermore, it is not the period that guarantees the operation of used parts. The time displayed in the menu screen may differ from the time described on the table.

ⓘ Audio recording is not performed when “PPS” of <RECORD SETTING> are all set to the value smaller than “0.333P” for normal recording.

• In this case, (🔇 X) appears to the right of <ESTD REC>.

ⓘ Audio recording is not performed when the camera selection for alarm recording is as follows:
“ALARM CH”: “A-PPS” of all the cameras set for alarm recording are set to the value smaller than “0.333P.”
“ALARM PLUS”: “PPS” and “A-PPS” of all the cameras set for normal recording and alarm recording are set to the value smaller than “0.333P.”

ⓘ ▭: Since audio recording cannot be made during recording interval of 0.25P and 0.125P, even when the recording with audio recording is set to ON, the recordable time is the same for when setting audio recording to OFF.

■ Pre-alarm recording time table

ⓘ The following table shows estimated recordable time when operating with one camera and the recording interval is set at a constant PPS rate given at the top of the column.

• Without Audio recording, recording duration “LONG”

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P	NUMBER OF RECORDING FIELD
SUPER	2.6s	5.2s	7.9s	10s	13s	15s	21s	26s	1min	2min10s	4min20s	8min40s	66
HIGH	3.4s	6.9s	10s	13s	17s	20s	27s	34s	1min20s	2min50s	5min40s	11min	87
STD	5.6s	11s	16s	22s	28s	33s	45s	56s	2min20s	4min40s	9min20s	18min	141
BASIC	7.9s	15s	23s	31s	39s	47s	1min	1min10s	3min10s	6min30s	13min	26min	198
LONG	17s	35s	52s	1min10s	1min20s	1min40s	2min20s	2min50s	7min10s	14min	29min	58min	438

• Without Audio recording, recording duration “MEDIUM”

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P	NUMBER OF RECORDING FIELD
SUPER	1.7s	3.5s	5.2s	7s	8.8s	10s	14s	17s	44s	1min20s	2min50s	5min50s	44
HIGH	2.3s	4.6s	6.9s	9.2s	11s	13s	18s	23s	58s	1min50s	3min50s	7min40s	58
STD	3.7s	7.5s	11s	15s	18s	22s	30s	37s	1min30s	3min	6min10s	12min	94
BASIC	5.2s	10s	15s	21s	26s	31s	42s	52s	2min10s	4min20s	8min40s	17min	132
LONG	11s	23s	35s	46s	58s	1min10s	1min30s	1min50s	4min50s	9min40s	19min	38min	292

• Without Audio recording, recording duration “SHORT”

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P	NUMBER OF RECORDING FIELD
SUPER	0.8s	1.7s	2.6s	3.5s	4.4s	5.2s	7s	8.8s	22s	44s	1min20s	2min50s	22
HIGH	1.1s	2.3s	3.4s	4.6s	5.8s	6.9s	9.2s	11s	29s	58s	1min50s	3min50s	29
STD	1.8s	3.7s	5.6s	7.5s	9.4s	11s	15s	18s	47s	1min30s	3min	6min10s	47
BASIC	2.6s	5.2s	7.9s	10s	13s	15s	21s	26s	1min	2min10s	4min20s	8min40s	66
LONG	5.8s	11s	17s	23s	29s	35s	46s	58s	2min20s	4min50s	9min40s	19min	146

• With Audio recording, recording duration “LONG”

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P
SUPER	2.5s	5s	7.5s	10s	12s	14s	19s	22s	51s	1min20s	4min20s	8min40s
HIGH	3.3s	6.7s	9.7s	12s	16s	18s	24s	30s	1min	1min30s	5min40s	11min
STD	5.5s	10s	15s	20s	25s	29s	37s	45s	1min20s	2min	9min20s	18min
BASIC	7.6s	14s	21s	27s	33s	38s	49s	58s	1min40s	2min20s	13min	26min
LONG	15s	30s	42s	53s	1min	1min10s	1min20s	1min30s	2min30s	3min	29min	58min

• With Audio recording, recording duration “MEDIUM”

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P
SUPER	1.6s	3.3s	5s	6.7s	8s	9.6s	12s	15s	34s	56s	2min50s	5min50s
HIGH	2.2s	4.4s	6.4s	8.6s	10s	12s	16s	20s	42s	1min	3min50s	7min40s
STD	3.6s	7.2s	10s	13s	16s	19s	24s	30s	58s	1min20s	6min10s	12min
BASIC	5.1s	9.9s	14s	18s	22s	25s	33s	39s	1min10s	1min30s	8min40s	17min
LONG	10s	20s	28s	35s	42s	48s	57s	1min	1min40s	2min	19min	38min

• With Audio recording, recording duration “SHORT”

GRADE \ PPS	25P	12.5P	8.333P	6.25P	5P	4.167P	3.125P	2.5P	1P	0.5P	0.25P	0.125P
SUPER	0.8s	1.6s	2.5s	3.3s	4s	4.8s	6.4s	7.6s	17s	28s	1min20s	2min50s
HIGH	1.1s	2.2s	3.2s	4.3s	5.4s	6.2s	8s	10s	21s	32s	1min50s	3min50s
STD	1.8s	3.6s	5.2s	6.8s	8.4s	9.8s	12s	15s	29s	42s	3min	6min10s
BASIC	2.5s	4.9s	7.2s	9.2s	11s	12s	16s	19s	35s	48s	4min20s	8min40s
LONG	5.1s	10s	14s	17s	21s	24s	28s	32s	50s	1min	9min40s	19min

(!) ▭: Since audio recording cannot be made during recording interval of 0.25P and 0.125P, even when the recording with audio recording is set to ON, the recordable time is the same for when setting audio recording to OFF.

•••••••

Troubleshooting

If problems with the unit persist even after you've followed the suggestions below, please disconnect the power cord and contact the retailer from whom you purchased the unit.

	Description of problem	Please consult the following	Page
INSTALLATION	The unit is not turned on.	• Is the power cord properly plugged in? • Is the SIMPLE LOCK or PASSWARD LOCK turned on? • Is the unit in timer recording stand-by mode? • Is the MAIN switch on the rear panel set to "OFF" ?	- 55 to 57 45 9
	Power is on, but the unit does not operate.	• Is the SIMPLE LOCK or PASSWARD LOCK turned on? • Is the POWER button flashing? (The unit cannot be operated when the POWER button is flashing.) • The safety features may be in operation. Press the RESET button located on the rear panel using a ballpoint pen or similar object and then turn the POWER on.	55 to 57 8 9, 68
	Images are not appearing on the monitor.	• Are the monitor and camera(s) connected correctly? • Is the unit receiving an input signal from the selected camera? Check this by displaying the SPLIT4 screen display.	12 37
	The quality of the monitor picture is poor.	• Is the cord connected correctly? • Is the camera's focus adjusted correctly?	- -
	<DEVICE ERROR> appears on the monitor.	• Check that the HDD is connected or attached correctly, and the HDD tray is attached correctly. When the message displays even after the above items are checked, the connector of the HDD tray may be defective. Consult your dealer.	14-17
RECORDING	The unit does not start recording.	• Are the "HDD REPEAT REC MAIN" set to "OFF" or "STANDBY" and "HDD REPEAT REC SUB" set to "OFF"? • The unit begins recording only after the specified recording interval time. Was the unit stopped during the specified recording interval time?	47 25, 26
	The unit does not stop recording.	• Is the SIMPLE LOCK or PASSWARD LOCK turned on? • During normal recording, alarm recording, and emergency recording, press both REC/STOP buttons. • Is timer recording in progress? To stop timer recording, press both TIMER ON/OFF buttons again.	55 to 57 10 44, 45
	The unit does not perform repeat recording.	• Are the "HDD REPEAT REC MAIN" and "HDD REPEAT REC SUB" set to "ON"?	47
	The unit does not perform timer recording.	• Are the date and present time set accurately? • Are the recording start-/end-times and the recording interval set correctly? • Are the "HDD REPEAT REC MAIN" set to "OFF" or "STANDBY" and "HDD REPEAT REC SUB" set to "OFF"? • Is the "A-PPS" in the <RECORD SETTING> set to "- - - - - -"? • Is the SUB HDD recordable capacity full?	24 44 to 46 47 42 24
	The unit does not perform alarm recording.	• Is the unit in timer recording stand-by mode? • Are the peripheral switches, etc., connected correctly?	45 12, 13
PLAYBACK	The unit does not perform playback.	• Is the SIMPLE LOCK or PASSWARD LOCK turned on? • Has the image data been erased? • Is the correct playback device selected?	55 to 57 54 63

	Description of problem	Please consult the following	Page
OTHERS	The unit does not perform the motion detection function.	• Is “TRIGGER” of the camera number for which the motion detection function is to be executed in the <ALARM SETTING> screen set to “EXT”? • Is “A-PPS” of the camera number for which the motion detection function is to be executed in the <RECORD SETTING> screen set to “- - - - - -”? • Is “MOTION THRESHOLD” in the <MOTION DETECTION SETTINGS> screen set to the value larger than that of “DETECTION MASK SETTING”?	41 42 38, 39
	The unit does not respond to PC control.	• Is the <RS-232C> set correctly? • Are the unit and computer connected correctly? • Is there a defect in the connecting cable? • Is the proper connecting cable used?	51, 52 - - -
	There is a camera number with a blue screen during split screen display.	• The screens of camera number with no video signal input will be blue even when setting for operation.	-
	Button operation is not working.	• Is the POWER button flashing? (The unit cannot be operated when the POWER button is flashing.) • Is the SIMPLE LOCK or PASSWARD LOCK turned on?	8 55 to 57

Warnings and CALL OUT output

■ Warnings and their appropriate countermeasures

#1 Options in the CALL OUT output column:
- Selectable : selects to output CALL OUT signal or not on the menu screen.
- Fixed : outputs CALL OUT signal from the CALL OUT terminal regardless of the menu setting.
- None : does not output CALL OUT signal, but displays a warning on the screen.

➲ CALL OUT signal output can be stopped by pressing the WARNING RESET button.

Warning Display	Status	Countermeasure	Canceling the warning	Code	CALL OUT output #1	page
REC/FULL	• MAIN HDD recordable capacity is full.	• When the warning is cancelled, the unit starts over-writing the oldest data remaining in the hard disk drive. • Replace with new HDD.	Press and hold the WARNING RESET button.	WNG1100	Selectable	47
REC/SUB FULL	• SUB HDD recordable capacity is full.			WNG1101		14-17
REC/REM	• The remaining HDD capacity has reached the value set in HDD REMAIN.	• Replace with new HDD.	Press and hold the WARNING RESET button.	WNG1200 (MAIN) WNG1201 (SUB)	Selectable	14-17
NO SIGNAL (The warning indicates the number of the non-functioning camera.)	• Video signal was lost for more than 5 seconds during recording.	• Check whether the unit and camera are properly connected, and that electri -city is on. • Check whether the video signal is being properly output. • Check that whether there is a camera set for operation with no video signal input.	Stop recording. Output video signals. Press and hold the WARNING RESET button.	WNG54□□ #3	Fixed	12 37 25, 26 41-43
IMAGE MODIFIED	• Video data that has been altered was played back.	——	Press and hold the WARNING RESET button.	WNG5500	Fixed when setting is “ON”	47, 48
SYSTEM ERROR REC/ SYSTEM ERROR PLAY/ SYSTEM ERROR	• System error has occurred.	• Reboot. • Check the HDD.	Press and hold the WARNING RESET button.	WNG5100 WNG14□□ #2 WNG24□□ #2	Fixed	-
REC/RW	• Error has occurred during writing of data to HDD.	• Check the HDD.	Press and hold the WARNING RESET button.	WNG13□□ #2	None	-
MIRROR	• One HDD could not be detected during mirroring.	• Reboot.	Press and hold the WARNING RESET button.	WNG6100	Fixed	54, 55 69
<DEVICE ERROR>	• Unable to recognize HDD. • HDD or HDD tray is connected or attached incorrectly.	• Reboot. • Check that the HDD or HDD tray is connected or attached correctly.	Turn off the power.	WNG6200	Fixed	54, 55 14-17
TEMP	• Issued when in a high temperature environment within the tolerance level.	• Turn off the power and change the installation condition.	Press and hold the WARNING RESET button. Lower the temperature.	WNG5200	None	-
FAN	• The fan stops.	• Turn off the power and stop usage.	Press and hold the WARNING RESET button. Rotate the fan.	WNG5300	Fixed	-
(NONE)	• Reboots by watchdog operation.	——	——	WNG5101	——	-

#2 : (The following numbers are in □□)
00 : A (MASTER) 01 : B (SLAVE)

#3 : (The following numbers are in □□)
01 : CAMERA IN 1 02 : CAMERA IN 2
03 : CAMERA IN 3 04 : CAMERA IN 4

•••••••

■ Glossary

• I/O terminals
Terms used for referring to both input and output.

• RS-232C
Connection standard used for handling data between devices such as a PC, modem, etc. A standard when connecting a PC and modem. The upper limit for the communication speed of this standard is 115.2 kbps and the maximum transfer distance is 15 m. Since this standard only defines the roles and physical characteristics of the connector pins, there are various types of connectors such as 25-pin, D-sub, etc.

• Hard disk drive (HDD)
Storage device using the same magnetic recording process as tapes and is used in PCs. An aluminium disk coated with magnetic materials is used on the surface as the storage medium and since there is no contact during recording/playback, there is no head wear. Data search is also quick since recording is performed in numbered sections called sectors.

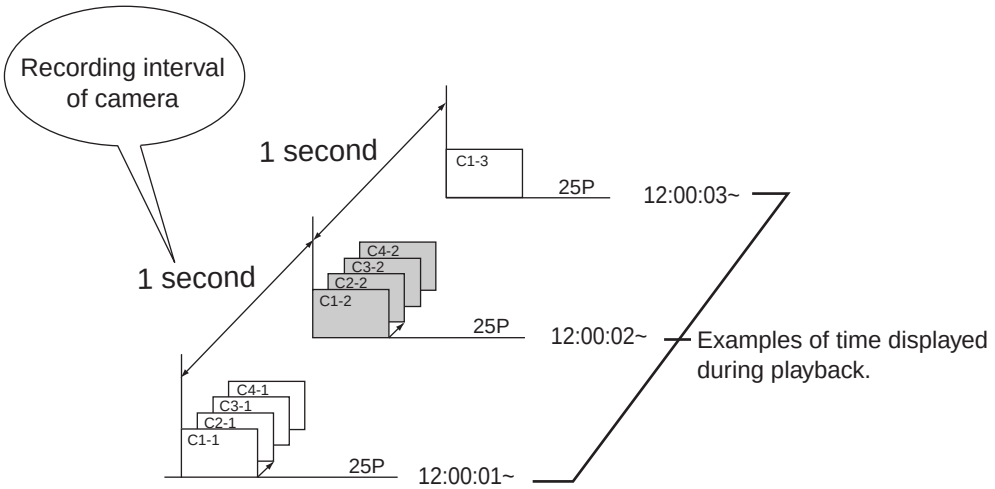
• Mirroring
One way of protecting data on magnetic disks. This function writes data alternately to 2 Hard disk drives with the same capacity. However, there is the demerit of using 2 drives in place of 1, resulting in half the available space.

• Capacity
Term to indicate the amount of data that can be stored in a storage device such as memory, disk, etc., and unit is indicated in B (bytes).

• Partition
A partition is one of the many divided areas on the Hard Disk.

■ Relation of recording operation to the number of cameras and recording interval settings

The recording pattern of this unit is as illustrated in the diagram below. Image data input from all the connected cameras is recorded sequentially at a rate of [number of cameras x recording interval]. (25P recording interval during normal recording.)



Specifications

Rated Power Supply:	AC 100 - 240 V 50/60 Hz
Rated Input:	0.4 - 0.2 A (100 - 240 V) (with 2 HDDs described on page 14 attached)
Color System:	PAL-type color system
Operating Temperature:	5 °C to 40 °C
Relative Humidity:	Max. 80 %
Altitude:	Max. 2000 m
Dimensions:	300 (Width) x 343 (Depth) x 88 (Height) mm
Weight:	5.8 kg
Recording System	Digital recording method using WAVELET compression
Sampling	13.5 MHz
Data Compression	WAVELET
Compression Unit	Field
Resolution	684 x 288
Recording Device	3.5 inch IDE HDD x 2 (Maximum capacity: 2 TB) Use with attached to the HDD tray
Video Input:	4 Input BNC-Connector: 1.0 V (p-p), 75 Ω
Video Output:	1 Output BNC-Connector: 1.0 V (p-p), 75 Ω
Audio Input:	1 Input RCA-Pin plug: 308 mV (rms), 50 kΩ
Audio Output:	1 Output RCA-Pin plug: 308 mV (rms), 1 kΩ
Timer Program:	8 programs-Daily start and stop time for one week x 3 set
Memory Backup:	Lasts for more than 1 month

CONNECTORS

ALARM IN(1-4) Input:	Terminal for starting alarm recording
EMERGENCY Input:	Terminal for starting emergency recording
GND:	Terminal for ground
MODE OUT(1-5) Output:	Terminal for indication of the operational state of the unit
RS-232C:	RS-232C (D-SUB 9 pin) connector for connection with personal computer
ETHERNET:	Connector: RJ-45 connector, Physical interface: 10BASE-T
REMOTE:	Connection with the wired remote control R-400

Rating:

MODE OUT(1-5)	Active:	“Low” Level	Max. Drive current 7 mA DC
	Non active:	Open	Max. Voltage +24 V DC
EMERGENCY	Active:	When terminals are short-circuited or “Low” Level voltage is applied	
	Non active:	Open	

Accessories

AC power cord	2 (for U.K/for the Continent)
Wired remote control R-400	1 (Length of the cable: 2 m)
Screw to attach the HDD holder to the HDD	8

Weight and dimensions shown are approximate.
Design and specifications are subject to change without notice.

This unit complies with the European EMC test standard EN50130-4.

DEUTSCH

STELLEN SIE NIEMALS SCHWERE GEGENSTÄNDE AUF DEN REKORDER (z. B. EIN FERNSEHGERÄT)

STECKEN SIE NIEMALS GEGENSTÄNDE IN DEN REKORDER

Gegenstände, die innen am Gehäuse anstoßen, oder alle eingesteckten Fremdkörper sind nicht nur gefährlich sondern verursachen auch große Beschädigung.

SCHÜTZEN SIE DAS NETZKABEL

Ein defektes Netzkabel kann Brand oder elektrischen Schlag verursachen. Im Falle eines defekten Netzkabels den Strom abschalten und das Kabel vorsichtig am Stecker herausziehen.

ZIEHEN SIE DAS NETZKABEL BEI LÄNGERER ABWESENHEIT HERAUS

Bei längerer Abwesenheit den Strom abschalten und das Netzkabel herausziehen.

SORGEN SIE FÜR GUTE VENTILATION

Blockieren Sie nicht die vielen Ventilationsöffnungen am Rekorder. Lassen Sie für eine maximale Ventilation etwas Platz um den Rekorder herum und stellen Sie den Rekorder nur auf eine harte ebene Oberfläche, und vergewissern Sie sich, daß sich während des Betriebs nichts auf dem Rekorder befindet.

WENN SIE DEN REKORDER NICHT BENUTZEN

Wenn das Gerät nicht verwendet wird, immer den Hauptschalter (MAIN) ausschalten (OFF).

PFLEGE DES GEHÄUSES

Verwenden Sie niemals Reinigungsmittel, die Petroleum enthalten. Ein weiches Tuch in Seifenlauge eintauchen, den Rekorder reinigen und trocken wischen. PVC-Kabel oder Leitungen sollten niemals über längere Zeit mit dem Gehäuse Kontakt haben.

AUFSTELLPLATZ

Wegen ausgezeichneter Leistung und langjähriger Zuverlässigkeit sollte der Platz:

1. **Gut belüftet sein und sich nicht in unmittelbarer Nähe der Heizung oder praller Sonne befinden.**
2. **Eine harte, erschütterungsfreie Unterlage haben.**
3. **Keine Feuchtigkeit, kaum Staub und keine magnetischen Felder aufweisen.**
4. **Bitte stellen Sie sicher, daß der sich auf der Rückseite des Rekorders befindliche Lüfter nicht blockiert ist.**

UNGEEIGNETE AUFSTELLPLÄTZE

Wenn Sie den Rekorder an den folgenden Plätzen aufstellen, kann dies die Lebensdauer des Gerätes verkürzen.

- **Extrem kalte Plätze, wie Kühl-Lagerhäuser und Kühlhäuser.**
- **Plätze, an denen Hydrogensulfide erzeugt werden, wie in Thermalquellen-Gebieten.**
- **Plätze oder Stellen mit einer salzigen Umgebungsluft.**

WARNUNG: **Um Brand oder elektrischen Schlag zu verhüten, den Rekorder vor Regen oder Feuchtigkeit schützen. Dieser Rekorder muß geerdet werden.**

Dieser Gerät entspricht den Anforderungen der EG Richtlinie 89/336/EWG, "EMV Richtlinie", und 73/23/EWG, "Niederspannungsrichtlinie", ergänzt durch die Richtlinie 93/68/EWG. Die Anforderungen an die Störfestigkeit gemäß EN 55024 und an die Störaussendung gemäß EN 55022 beim Betrieb im Wohnbereich, in Geschäfts- und Gewerbebereichen sowie in Kleinbetrieben, sowohl innerhalb als auch außerhalb der Gebäude werden eingehalten. Alle Einsatzorte sind dadurch gekennzeichnet, daß sie direkt an die öffentliche Niederspannungs-Stromversorgung angeschlossen sind.
Dieses Gerät wurde entsprechend der Norm EN 60950 hergestellt.

Hinweise zum Aufbau des Überwachungssystems unter Verwendung dieses Gerätes

- **Dieses Gerät kann über den RS-232C-Anschluss oder den Ethernet-Anschluss durch externe Geräte gesteuert werden. Wegen dieser Funktionen kann dieses Gerät flexibel auf hochgradige Sicherheitssysteme angewendet werden, aber das gesamte Überwachungssystem kann abhängig vom Einstellungsinhalt dieses Gerätes oder dem Anschluss oder der Kombination zwischen den externen Geräten durch eine Fehlfunktion dieses Gerätes oder der externen Geräte beeinflusst werden.**
- **Bei Konfiguration eines Überwachungssystems unter Verwendung dieses Gerätes wird empfohlen, zuerst sicherzustellen, dass dieses Gerät normal mit den externen Geräten angeschlossen bzw. kombiniert funktioniert.**
- **Es wird empfohlen, wichtige Aufzeichnungen periodisch zu anderen Geräten zu kopieren bzw. zu sichern.**
- **Für durch eine Fehlfunktion dieses Gerätes verursachte Betriebsstörungen des Überwachungssystems, Verlust der aufgezeichneten Daten oder sonstige Schäden wird nicht gehaftet.**

Es kann Fälle geben, in denen die eingebaute Bewegungsentdeckungsfunktion des Gerätes auf Grund von externen Bedingungen, Videoeingangssignal oder anderen Faktoren nicht angemessen arbeitet.

Der Benutzer wird nicht entschädigt für Probleme (z.B. Versagen von Aufzeichnung oder Wiedergabe), die mit dem Gerät oder einem angeschlossenen Gerät während des Betriebs auftreten. Es wird als Vorsichtsmaßnahme gegenüber Ausfall und Unfälle empfohlen, in regelmäßigen Zeiträumen Sicherheitskopien von wichtigen Aufzeichnungen zu machen.

Mögliche Aufnahmezeit und Produktgarantie

Die kontinuierliche mögliche Aufnahmezeit und die am Menübildschirm angezeigte geschätzte Zeit bezeichnen die mögliche kontinuierliche Aufnahmezeit bei Betrieb dieses Gerätes und nicht die Garantiezeit für das Produkt. Es handelt sich hierbei auch nicht um die garantierte Betriebszeit für die verwendeten Teile.

- **Die von diesem Gerät verwendete eingebaute Festplatte ist ein Präzisionsgerät. Lassen Sie bei der Handhabung dieses Gerätes ausreichende Sorgfalt walten.**
- **Setzen Sie dieses Gerät nicht Vibrationen oder Stößen aus. Dies kann besonders bei eingeschaltetem Gerät und während Zugriff auf die Festplatte zu Störungen führen, weshalb ausreichende Vorsicht erforderlich ist.**
- **Ziehen Sie bei eingeschaltetem Gerät bzw. Während Aufnahme und Wiedergave nicht den Stecker des Netzkabels aus der Steckdose.**
- **Für frühzeitige Entdeckung von Störungen empfehlen wir, dass Sie das Gerät jedes Jahr inspizieren lassen.**

FRANÇAIS

INTERDICTION DE POSER DES OBJETS LOURDS SUR LE ENREGISTREUR (PAR EX: TÉLÉVISEUR)

INTERDICTION DE TOUCHER L'INTÉRIEUR DE L'ENREGISTREUR ET D'Y INTRODUIRE TOUT CORPS ÉTRANGER

Tout contact avec l'intérieur du boîtier ou toute introduction de corps étranger peut non seulement constituer un danger mais peut également entraîner d'importants dégâts.

PROTECTION DU CÂBLE D'ALIMENTATION

Un câble d'alimentation endommagé est une source potentielle d'incendie et d'électrocution. Si le câble d'alimentation est endommagé, couper le courant au niveau de la prise et débrancher soigneusement le câble en tirant sur la fiche.

DÉBRANCHER LE CÂBLE D'ALIMENTATION EN CAS D'ABSENCE PROLONGÉE

Couper le courant et débrancher le câble d'alimentation en cas d'absence prolongée.

MAINTENIR UNE BONNE VENTILATION

Ne pas obstruer les nombreux trous de ventilation de l'enregistreur. Pour obtenir la ventilation maximale, laisser de l'espace autour de l'enregistreur, le placer seulement sur une surface dure et de niveau et veiller à ce qu'il ne soit jamais recouvert pendant l'utilisation. Ne jamais placer d'objet lourd sur l'enregistreur.

LORSQUE L'APPAREIL EST INUTILISÉ

Lorsqu'on ne se sert pas de l'appareil, toujours couper (OFF) l'interrupteur MAIN.

ENTRETIEN DU BOÎTIER

Ne jamais utiliser de détergents à base de pétrole. Nettoyer à l'aide d'un chiffon doux imbibé d'eau savonneuse puis sécher. Les câbles en PVC ne doivent pas être laissés en contact avec la surface du boîtier pendant de longues périodes.

EMPLACEMENT D'INSTALLATION

Pour obtenir d'excellentes performances et une fiabilité à long terme, l'emplacement de l'appareil doit être:

1. **Bien ventilé, à l'abri des rayons du soleil et éloigné de sources de chaleur.**
2. **Posé sur une surface solide et à l'abri de toute vibration.**
3. **Sans humidité importante ni poussière excessive et éloigné des champs magnétiques.**
4. **Veuillez vous assurer que le ventilateur d'aération situé sur le panneau arrière de l'enregistreur n'est pas bloqué.**

EMPLACEMENTS INADEQUATS

L'installation de l'enregistreur dans les endroits suivants peut réduire sa durée de vie:

- **Les endroits extrêmement froids tels que les entrepôts réfrigérés et chambres froides.**
- **Les atmosphères contenant un excès de sulfure d'hydrogène telles qu'à proximité des sources chaudes.**
- **Les régions avec air salin.**

ATTENTION: AFIN D'ÉVITER TOUT RISQUE D'ÉLECTROCUTION ET D'INCENDIE, NE PAS EXPOSER CET APPAREIL À LA PLUIE OU À L'HUMIDITÉ. CET APPAREIL DOIT ÊTRE RACCORDÉ À LA TERRE.

Cet enregistreur longue durée satisfait aux exigences des directives communautaires n° 89/336/CEE "Directive Compatibilité Electromagnétique" et n° 73/23/CEE "Directive Basse Tension", modifiées par la directive n° 93/68/CEE. Les exigences sur la susceptibilité conformément à la norme EN 55024 et les exigences sur les perturbations conformément à la norme EN 55022 sont respectées pour le fonctionnement dans des zones résidentielles, commerciales, locaux d'industries légères et dans des entreprises de taille moyenne, à l'intérieur ainsi qu'à l'extérieur de l'immeuble. Les lieux d'usage de l'appareil doivent être reliés au réseau public d'alimentation électrique à basse tension selon les règles de l'art. Cet appareil est fabriqué conformément à la norme EN 60950.

Avis à propos de la réalisation d'un système de surveillance en utilisant cet appareil

- **Cet appareil peut être commandé par des appareils extérieurs par la prise RS-232C ou la prise ETHERNET. Cet appareil peut aussi être utilisé pour commander les appareils extérieurs par la prise RS-232C. Grâce à ces fonctions, la flexibilité de cet appareil peut être utilisée dans les systèmes de sécurité haut de gamme, mais le système de surveillance dans son ensemble peut être affecté par le mauvais fonctionnement de cet appareil ou des appareils extérieurs en fonction des réglages de cet appareil, des connexions ou de la combinaison des appareils extérieurs.**
- **Lors de la configuration d'un système de surveillance en utilisant cet appareil, il est recommandé de vérifier d'abord que cet appareil fonctionne normalement avec les autres appareils connectés ou en combinaison.**
- **Il est recommandé de copier ou de sauvegarder périodiquement les contenus importants enregistrés sur d'autres appareils.**
- **Les dommages consécutifs à une erreur de fonctionnement du système de surveillance, les pertes de données enregistrées ou tout autre dommage provenant d'un mauvais fonctionnement de cet appareil ne sont pas couverts.**

Dans certains cas, la fonction DETECTION MOUV. incorporée dans l'appareil ne fonctionne pas convenablement en raison des conditions externes ou du signal d'entrée vidéo ou d'autres facteurs.

L'utilisateur ne sera pas dédommagé des problèmes (par exemple, une défaillance d'enregistrement ou une défaillance de lecture) se produisant soit avec l'appareil, soit avec un dispositif connecté, pendant le fonctionnement. Il est conseillé que des sauvegardes des enregistrements importants soit effectuée régulièrement à titre de précaution contre des pannes et accidents possibles.

Temps d'enregistrement possible et garantie du produit

L'affichage du temps d'enregistrement en continu possible et du temps estimé sur l'écran de menu représente le temps d'enregistrement en continu possible losque l'appareil fonctionne; il ne représente pas la période de garantie du produit. De plus, il ne représente pas la période de garantie des piéces usagées.

- **L'appareil utilise un disque dur intégré, qui est un dispositif de précision. Veuilez manipuler cet appareil avec en faisant suffisamment attention.**
- **Ne soumettez pas cet appareil aux vibrations ou aux chocs. Cela pourrait causer des problèmes quand l'appareil est sous tension ou lors de l'accés au disque dur, et c'est pourquoi il est nécessaire de faire suffisamment attention.**
- **Ne déconnectez pas la fiche d'alimentation secteur pendant que l'apppareil est sous tension ou pendant l'enregistrement ou la lecture.**
- **Afin de pouvoir détecter rapidement les problèmes, nous recommandons que vous effectuiez une inspection une fois par an.**

CASTELLANO

NO COLOQUE NUNCA OBJETOS PESADOS SOBRE LA UNIDAD (P.E. TV)

NO TOCAR NUNCA NI INSERTAR OBJETO ALGUNO EN EL INTERIOR DEL UNIDAD

El tocar el interior de la caja o el insertar objetos extraños de cualquier clase no sólo crea peligros a la seguridad del usuario sino que también será causa de graves daños.

DESCONECTE EL CABLE DE ALIMENTACION AL AUSENTARSE POR PERIODOS PROLONGADOS DE TIEMPO

Al ausentarse de casa por períodos prolongados de tiempo, apague siempre el grabador de videocassettes y desconecte el cable de alimentación.

DESENCHUFE EL CABLE DE ALEMENTACIÓN DURANTE AUSENCIAS PROLONGADAS

Apague la corriente y desenchufe el cable de alimentación durante ausencias prolongadas.

MANTENGA UNA BUENA VENTILACIÓN

No obstruya los orificios de la ventilación principal del grabador. Para lograr la máxima ventilación, deje cierto espacio alrededor del grabador, colóquelo únicamente sobre una superficie plana y rígida, y asegúrese de que el aparato no esté cubierto durante su uso. Nunca deben colocarse objetos pesados sobre el grabador.

CUANDO NO SE UTILICE

Simpre asegese de desactivar (OFF) el interruptor PRINCIPAL (MAIN) de la unidad cuando no la utilice.

CUIDADOS CON LA CAJA

No utilizar nunca productos de limpieza que contengan petróleo. Limpie la caja con un paño suave humedecido en agua y jabón. Los cables del grabador no deberán estar en contacto con las superficies de la caja por un período de tiempo muy largo.

INSTALACIÓN

Para lograr un óptimo y duradero funcionamiento, instalar el grabador en un lugar que esté:

1. **Bien ventilado y alejado de la luz directa del sol y de otras fuentes de calor.**
2. **Una superficie exenta de vibraciones.**
3. **Libre de excesiva humedad, polvo y alejado de campos magnéticos.**
4. **Compruebe que el ventilador situado en el panel posterior de la grabadora no está bloqueado.**

LUGARES INAPROPIADOS DE INSTALACIÓN

Localizar el grabador en los siguientes lugares puede causar una reducción de la vida útil de este producto:

- **Lugares extremadamente fríos, tales como un almacén refrigerado o una fábrica de hielo.**
- **Lugares donde existan emanaciones excesivas de hidrógeno sulfúrico, tales como zonas de manantiales calientes.**
- **Lugares o localidades de aire salino.**

ADVERTENCIA: PARA EVITAR INCENDIOS O DESCARGAS ELÉCTRICAS, NO EXPONER EL APARATO A LA LLUVIA O LA HUMEDAD.

Este unidad está fabricada de acuerdo con las Directivas del Consejo de la Unión Europea 89/336/CEE, "EMC Directive" y la Directiva del Consejo 73/23/CEE relativa a "Directiva de Baja Tensión", de acuerdo con las modificaciones establecidas por la Directiva 93/68/CEE. Asímismo, también se observan las normativas EN 55024 para la inmunidad y las EN 55022 para las interferencias en lo que respecta al funcionamiento del aparato en zonas residenciales, en las empresas comerciales y de industria ligera, en las pequeñas empresas, tanto en el interior como en el exterior del edificio. Todos los lugares de funcionamiento están caracterizados por estar conectados al sistema público de alimentación de baja tensión. Esta unidad está fabricada de acuerdo con EN 60950.

Aviso sobre la construcción del sistema de vigilancia utilizando esta unidad

- **Esta unidad puede ser controlada mediante dispositivos externos a través del terminal RS-232C o el terminal ETHERNET. También es posible utilizar esta unidad para controlar dispositivos externos a través del terminal RS-232C. Debido a estas funciones, la unidad puede aplicarse con flexibilidad a los sistemas de seguridad de alta calidad. No obstante, dependiendo de los ajustes de esta unidad o de la conexión o combinación entre dispositivos externos, podría suceder que todo el sistema de vigilancia sea afectado por un fallo de funcionamiento de esta unidad o de los dispositivos externos.**
- **Cuando configure un sistema de vigilancia utilizando esta unidad, se recomienda confirmar en primer lugar que la misma pueda operar de manera normal con otros dispositivos conectados o combinados.**
- **Se recomienda sacar copias o salvaguardar periódicamente, en otros dispositivos, los datos importantes grabados.**
- **No se cubren los daños resultantes de un error de funcionamiento del sistema de vigilancia o de la pérdida de los datos grabados, o cualesquier otros daños producidos por un desperfecto de esta unidad.**

En algunos casos, puede suceder que la función DETEC MOVIMIENTO incorporada a la unidad no funcione correctamente debido a condiciones externas, a señal de entrada de vídeo u otros factores.

No se indemnizará al usuario por problemas (por ejemplo, fallos de grabación o de reproducción) que pudieran producirse durante la operación, ya sea en la unidad o en un dispositivo conectado. Se recomienda efectuar regularmente copias de seguridad de las grabaciones importantes como una medida de protección contra posibles averías y accidentes.

Tiempo posible de grabación y garantía del producto

El tiempo posible de grabación continua y el tiempo estimado de visualización en la pantalla de menú es el tiempo de grabación continua posible sobre la operación esta unidad, y no es el período de garantía del producto. Tampoco es el período que garantiza la operación de las pieza utilizadas.

- **Esta unidad utiliza un disco duro incorporado, que es un dispositivo de precisión. Por favor trate esta unidad con sumo cuidado.**
- **Evite someter esta unidad a los ruidos o vibraciones. Los problemas tienden a producirse especialmente cuando se enciende esta unidad o se accede al disco duro y por lo tanto, se requiere especial cuidado.**
- **No desconecte el enchufe de alimentación mientras la unidad está encendida o durante la grabación o reproduddión.**
- **Para detectar las averías con antelación, se recomienda solicitar la inspección una vez al año.**

ITALIANO

NON COLLOCARE SULL'UNITÀ OGGETTI PESANTI (es. apparecchio TV)

NON TOCCARE E NON INSERIRE OGGETTI ALL'INTERNO DELL'UNITÀ
Toccare all'interno del mobiletto che contiene l'unità o inserire oggetti estranei, di qualsiasi tipo, oltre ad essere causa di pericolo per la sicurezza può condurre a danni onerosi.

PROTEGGERE IL CAVO DI ALIMENTAZIONE ELETTRICA
Il danneggiamento del cavo di alimentazione elettrica può essere causa d'incendio o scossa elettrica. Se il cavo di alimentazione elettrica è danneggiato, togliere la corrente alla presa a muro della rete elettrica e, con molta attenzione, sfilare la spina afferrandola direttamente, senza tirare afferrando il cavo.

PRIMA DI UNA LUNGA ASSENZA, SFILARE LA SPINA DEL CAVO DI ALIMENTAZIONE ELETTRICA
Prima di una lunga assenza, spegnere l'unità e sfilare la spina del cavo di alimentazione elettrica dalla presa di rete.

MANTENERE SEMPRE UNA BUONA VENTILAZIONE
Non ostruire i molti fori di ventilazione dell'unità. Per assicurare la massima ventilazione, lasciare dello spazio attorno all'unità, collocare l'unità solo su una superficie rigida e a livello, e accertarsi che durante l'uso non venga coperta. Non collocare nessun oggetto sull'unità.

QUANDO SI TERMINA L'USO
Quando non se ne fa uso regolare sempre su OFF l'interruttore MAIN dell'apparecchio.

CURA DEL MOBILETTO ESTERNO
Non usare mai preparati per la pulizia che contengano benzina. Pulire usando un panno morbido inumidito con acqua e sapone e asciugare, strofinando con un panno asciutto. I cavi in PVC o i fili non devono essere lasciati a lungo a contatto con la superficie esterna del mobiletto.

POSTO D'INSTALLAZIONE
Per assicurarsi il massimo rendimento dell'unità e mantenerla a lungo in perfetta efficienza, installarla in un posto che sia:
1. **Ben ventilato, non esposto alla luce diretta del sole e lontano da fonti di calore.**
2. **Abbia una superficie di appoggio solida e senza vibrazioni.**
3. **Non esposto ai rischi di alta umidità, polvere eccessiva e che sia lontano da campi magnetici.**
4. **Assicurarsi che la ventola di ventilazione che si trova nel pannello posteriore non sia ostruita.**

POSTI NON ADATTI
Collocare l'unità nei posti seguenti potrebbe accorciarne la durata di vita utile:
- **Posti estremamente freddi, quali magazzini refrigerati e ghiacciaie.**
- **Posti dove può essere prodotto molto solfuro d'idrogeno, ad esempio in stabilimenti termali.**
- **Posti o ambienti con aria ricca di sale.**

AVVISO: PER EVITARE I RISCHI DI 'INCENDIO O SCOSSA ELETTRICA, NON ESPORRE QUEST'APPARECCHIO A PIOGGIA O ALTA UMIDITÀ. QUEST'APPARECCHIO HA BISOGNO DI ESSERE MESSO ELETTRICAMENTE A TERRA.

Questa Unità è conforme alla direttiva della CE 89/336/EEC, "Direttiva EMC" e della direttiva EC 73/23/EEC "Direttiva sui bassi voltaggi", così come emendata dalla Direttiva 93/68/EEC. I requisiti per la suscettibilità in conformità con EN 55024 e il requisito per le interferenze in conformità con EN 55022 sono osservati per il funzionamento in zone residenziali, per uffici, zone a bassa attività industriale e in stabilimenti non molto grandi, sia all'interno che all'esterno dei palazzi. Tutti i posti di funzionamento sono caratterizzati dal loro collegamento alla rete pubblica di energia elettrica a basso voltaggio. Quest'unità è stata fabbricata in conformità con EN 60950.

Avviso sulla configurazione del sistema di sorveglianza utilizzando questa unità
- **Questa unità può essere controllata da dispositivi esterni tramite il terminale RS-232C o il terminale ETHERNET. È inoltre possibile utilizzare questa unità per controllare dispositivi esterni tramite il terminale RS-232C. Per queste funzionalità, questa unità si integra flessibilmente con i sistemi di sicurezza di livello più elevato, tuttavia, l'intero sistema di sorveglianza può essere influenzato dal funzionamento non corretto di questa unità o dei dispositivi esterni, a seconda della configurazione delle impostazioni di questa unità o a seconda della connessione o della combinazione dei dispositivi esterni.**
- **Quando si configura un sistema di sorveglianza utilizzando questa unità, si consiglia di verificare preventivamente che questa unità funzioni regolarmente con gli altri dispositivi collegati o combinati.**
- **Si consiglia di copiare o eseguire il backup periodico dei dati importanti registrati sugli altri dispositivi.**
- **Il produttore non si assume alcuna responsabilità per danni provocati da eventuali errori di funzionamento del sistema di sorveglianza o da perdita dei dati registrati o per qualsiasi altro danno provocato dal funzionamento non corretto di questa unità.**

Ci possono essere casi in cui la funzione MOTION DETECTION (RILEVAMENTO MOVIMENTO), incorporata nell'unità non funzioni correttamente a causa di condizioni esterne, o segnale d'ingresso video, o altri fattori.

L'utente non sarà indennizzato per problemi (es., mancata registrazione o mancata riproduzione) che si verifichino con quest'unità o con un'apparecchiatura collegata durante il funzionamento. Si raccomanda di fare, regolarmente, copie di riserva di registrazioni importanti, per precauzione contro i rischi di guasti e incidenti.

Tempo di registrazione e garanzia del prodotto
Quando quest'unità viene utilizzata, la visualizzazione del tempo di registrazione ininterrotta e del tempo stimato, sullo schermo di menu, sta a indicare il tempo di registrazione ininterrotta en non indica il periodo di garanzia. Ugualmente, non indica il periodo di garanzia di funzionamento delle parti utillizzate.

- **Questa unità impiega un disco fisso incorporato, che è un dispositivo di precisione. Maneggiare questa unità con la dovuta cautela.**
- **Non sottoporre questa unità a vibrazioni o urti. Questo può causare problemi particolarmente quando l'unità è accesa o durante l'accesso al disco rigido, per cui è necessario usare la dovuta cautela.**
- **Non scollegare la spina del cavo di alimentazione mentre l'unità è accesa o durante la registrazione o la riproduzione.**
- **Per una rapida individuazione di eventuali problemi, consigliamo di richiedere un'ispezione una volta all'anno.**

NEDERLANDS

ZET IN GEEN GEVAL ZWARE VOORWERPEN BOVENOP DIT TOESTEL (BIJV. TV.)

RAAK IN GEEN GEVAL ENIG VOORWERP IN HET TOESTEL AAN EN STEEK ER NIETS IN

Aanraken van het binnenwerk, of naar binnen steken van voorwerpen die daar niet in thuishoren kan niet alleen gevaar opleveren, maar ook ernstige schade veroorzaken.

BESCHERM HET NETSNOER

Schade aan het netsnoer kan leiden tot een elektrische schok of brand. Als het netsnoer beschadigd is, dient u de stroomvoorziening voor het stopcontact uit te schakelen en vervolgens de stekker voorzichtig uit het stopcontact te trekken.

HAAL DE STEKKER UIT HET STOPCONTACT BIJ LANGERE AFWEZIGHEID

Schakel de stroom uit en haal de stekker uit het stopcontact wanneer u langere tijd afwezig zult zijn.

ZORG VOOR EEN GOEDE VENTILATIE

Zorg ervoor dat de vele ventilatie-openingen in de behuizing van het toestel niet afgedekt worden. Voor een zo goed mogelijke ventilatie dient u enige ruimte rondom het toestel vrij te houden, het toestel alleen op een harde ondergrond te plaatsen en ervoor te zorgen dat het tijdens gebruik niet wordt afgedekt. Plaats in geen geval zware voorwerpen op het toestel.

WANNEER U HET TOESTEL NIET GEBRUIKT

Schakel altijd de HOOFDSCHAKELAAR van het toestel uit wanneer u het toestel.

VERZORGING VAN DE BEHUIZING

Gebruik in geen geval reinigingsmiddelen op petroleum-basis. Reinig de behuizing met een zachte doek die bevochtigd is met zeep en water en wrijf de behuizing vervolgens droog. PVC kabels en bedrading mogen niet langere tijd in contact blijven met het oppervlak van de behuizing.

INSTALLATIEPLEK

Voor de beste prestaties en betrouwbaarheid op de lange termijn dient u voor de installatie een locatie te kiezen die:

1. **Goed geventileerd is, uit de zon en uit de buurt van directe hittebronnen.**
2. **Een solide, trillingsvrije ondergrond biedt.**
3. **Vrij is van hoge vochtigheid, overmatig stof en uit de buurt van magnetische velden.**
4. **Waarborgt dat de ventilator aan de achterkant van het toestel niet geblokkeerd wordt.**

ONGESCHIKTE LOCATIES

Als u het toestel in de volgende locaties plaatst, kan de levensduur van het product bekort worden:

- **Zeer koude plekken, zoals gekoelde pakhuizen en magazijnen.**
- **Plekken waar de mogelijkheid bestaat dat grotere hoeveelheden waterstof-sulfide vrijkomen, zoals gebieden met hete bronnen.**
- **Plekken of locaties met zoute lucht.**

WAARSCHUWING: OM HET GEVAAR VAN ELEKTRISCHE SCHOKKEN EN BRAND TE VOORKOMEN, MAG U DIT APPARAAT NIET BLOOTSTELLEN AAN REGEN OF VOCHT. DIT APPARAAT MOET GEAARD WORDEN.

DIT toestel voldoet aan de vereisten van EC Richtlijn 89/336/EEC, "EMC Richtlijn" en 73/23/EEG, "Laagspanningsrichtliin", zoals geamendeerd door Richtlijn 93/68/EEC. Aan de vereisten voor de gevoeligheid volgens EN 55024 en de vereisten voor interferentie volgens EN 55022 wordt voldaan voor woongebieden, zaken- en licht industriele terreinen en kleinbedrijf, zowel binnen als buiten de gebouwen. Alle gebruikslocaties worden gekarakteriseerd door hun aansluiting op het publieke laagspanningsnet. DIT toestel is gefabriceerd in overeenstemming met EN 60950.

Opmerking betreffende constructie van een bewakingssysteem met dit toestel

- **Dit toestel kan worden aangestuurd door externe apparatuur via de RS-232C of de ETHERNET aansluiting. Dit toestel kan ook worden gebruikt om ander apparatuur aan te sturen via de RS-232C aansluiting. Deze eigenschappen stellen u in staat dit toestel flexibel in te passen in een hoogwaardig bewakingssysteem, maar zorgen er ook voor dat het bewakingssysteem hinder zal ondervinden bij een storing aan dit toestel of aan de op dit toestel aangesloten externe apparatuur, of bij storingen aan de verbindingen tussen dit toestel en de aangesloten apparatuur.**
- **Wanneer u een bewakingssysteem met dit toestel samenstelt, verdient het aanbeveling van tevoren te bepalen of dit toestel naar behoren kan functioneren indien aangesloten op of gecombineerd met de andere apparatuur.**
- **Het verdient aanbeveling regelmatig reservekopieën te maken van belangrijke opnamen of gegevens op andere apparatuur.**
- **Geen aansprakelijkheid wordt aanvaardt voor enige schade als gevolg van het niet naar behoren functioneren van het bewakingssysteem of als gevolg van het verlies van opnamen of gegevens, noch voor enige andere schade als gevolg van het niet naar behoren functioneren van dit toestel.**

Er kunnen zich gevallen voordoen waarin de ingebouwde MOTION DETECTION (BEWEGINGSDETECTIE) functie van het toestel niet naar behoren functioneert vanwege externe omstandigheden, het video-ingangssignaal of andere factoren.

De gebruiker zal niet worden gevrijwaard tegen problemen (bijv. niet opnemen of afspelen) die in het gebruik kunnen optreden met DIT product of een aangesloten toestel. U wordt aanbevolen regelmatig reservekopie te maken van belangrijke opnamen als voorzorg tegen mogelijke defecten en ongelukken.

Opnametijd en productgarantie

De op het menuscherm aangegeven continue opnametijd en de geschatte tijdsaanduiding zijn aanduidingen van de continue opnametijd bij gebruik van dit toestel en niet de garantieperiode voor het product. Bovendien is dit niet de garantieperiode voor gebruikte onderdelen.

- **Dit toestel heeft een ingebouwde hard disk, een stukje precisie apparatuur. Wees daarom voorzichtig met het toestel.**
- **Stel dit toestel niet bloot aan trillingen of schokken. Dit kan in het bijzonder problemen geven wanneer het toestel is ingeschakeld of wanneer de harddisk in werking is. Wees daarom voozichtig.**
- **Maak de stroomvoorziening niet los terwijl het toestel ingeschakeld is of terwijl er wordt opgenomen of afgespeeld.**
- **Om eventuele mankementen in een zo vroeg mogelijk stadium op het spoor te komen raden we u aan het toestel één keer per jaar te laten inspecteren.**

PORTUGES

OBJETOS PESADOS NUNCA DEVEM SER COLOCADOS EM CIMA DO APARELHO (POR EX., TV)

NÃO MEXA DENTRO DO APARELHO NEM INSIRA NELE QUALQUER OBJETO

Tocar a parte interna do gabinete ou inserir objetos estranhos de qualquer natureza além de provocar um risco em termos de segurança, podem causar danos consideráveis ao aparelho.

PROTEJA O FIO DE ELETRICIDADE

O fio de eletricidade danificado pode provocar incêndio ou choques. Se o cabo principal estiver danificado, desligue a rede elétrica e retire com cuidado o fio da tomada da parede.

DESCONECTE O FIO DE ELETRICIDADE DURANTE UMA LONGA AUSÊNCIA

Desligue a eletricidade e desconecte o fio de eletricidade durante uma longa ausência.

MANTENHA UMA BOA VENTILAÇÃO

Não obstrua os vários orifícios de ventilação do aparelho. Para uma ventilação máxima, deixe algum espaço em volta do aparelho e o coloque somente numa superfície plana e dura, certificando-se de que não fique coberto durante o uso. Objetos pesados nunca devem ser colocados em cima do aparelho.

QUANDO NÃO ESTIVER SENDO USADO

Quando o aparelho não estiver sendo usado, DESLIGUE (OFF) sempre seu interruptor PRINCIPAL (MAIN).

CUIDADOS COM O GABINETE

Não use nunca limpadores à base de petróleo. Limpe com um pano macio umedecido com água e sabão e esfregue até secar. Os cabos de PVC ou de chumbo não devem ficar em contato com a superfície do gabinete por longos períodos de tempo.

LOCAL PARA INSTALAÇÃO

Para um ótimo desempenho e uma fidedignidade duradoura, instale o aparelho num local:

1. **Bem ventilado, longe da luz direta do sol e distante de fontes diretas de calor.**
2. **Numa superfície sólida livre de vibrações.**
3. **Livre de grande umidade, poeira excessiva e longe de campos magnéticos.**
4. **Certifique-se que o ventilador localizado na parte de trás do painel do aparelho não esteja bloqueado.**

LOCAIS NÃO APROPRIADOS

A colocação do aparelho nos seguintes locais pode encurtar a vida útil do produto:

- **Locais extremamente frios, como depósitos refrigerados e frigoríficos.**
- **Locais onde se pode gerar quantidades excessivas de sulfito de hidrogênio, como por exemplo áreas de estações hidrotermais.**
- **Locais de atmosfera salina.**

AVISO: PARA EVITAR INCÊNDIO OU RISCO DE CHOQUES, NÃO EXPONHA ESTE APARELHO À CHUVA OU UMIDADE. ESTE APARELHO DEVE TER LIGADO À TERRA.

Este aparelho cumpre os requisitos da Diretriz EC 89/336/EEC, "Diretriz EMC", e 73/23/EEC, "Diretriz sobre Baixa Voltagem", corrigida pela Diretriz 93/68/EEC. Foram observados os requisitos de susceptibilidade de acordo com EN 55024 e os de interferência, segundo EN 55022 para a operação em áreas residenciais, comerciais, locais de indústrias leves e de empresas de pequeno porte, tanto dentro como fora dos prédios. Todos os locais de operação são caracterizados pela sua conexão ao sistema público de abastecimento de eletricidade de baixa voltagem. Este aparelho foi fabricado de acordo com EN 60950.

Aviso sobre a construção do sistema de vigilância desta unidade

- **Esta unidade pode ser controlada por dispositivos externos através do terminal RS-232C ou terminal ETHERNET. Esta unidade também pode ser usada para controlar os dispositivos externos através do terminal RS-232C. Graças a estas funções, esta unidade pode ser usada com flexibilidade num sistema de segurança de alto nível, mas o inteiro sistema de vigilância pode ser afetado pelo mau funcionamento desta unidade ou dos dispositivos externos, dependendo do conteúdo da configuração desta unidade ou da conexão ou combinação entre os dispositivos externos.**
- **Ao configurar um sistema de vigilância utilizando esta unidade, recomendamos que confirme primeiro que esta unidade esteja funcionando normalmente com os outros dispositivos conectados ou combinados.**
- **Recomendamos que copie ou faça um backup dos dados gravados importantes para os outros dispositivos periodicamente.**
- **Danos decorrentes de qualquer erro operacional do sistema de vigilância ou perda dos dados gravados, ou quaisquer outros danos devido a um mau funcionamento desta unidade não são cobertos pela garantia.**

Podem ocorrer casos em que a função integrada de MOTION DETECTION (DETECÇÃO DE MOVIMENTO) não funcione corretamente devido a condições externas ou sinais de entrada de vídeo, entre outros fatores.

O usuário não será indenizado por problemas (ex., falha na gravação ou na reprodução) que ocorram tanto com o aparelho ou com um dispositivo conectado a ele durante a operação. Recomenda-se fazer regularmente cópias-reserva de gravações importantes, como precaução contra possíveis panes ou acidentes.

Tempo de gravação e garantia do produto

O tempo de gravação contínua e a exibição do tempo estimado na tela do menu correspondem ao tempo de gravação contínua durante o funcionamento desta unidade, não ao período de garantia do produto. Tampouco correspondem ao período de garantia de funcionamento das peças usadas.

- **Esta unidade utiliza um disco rígido incorporado, que é um dispositivo de precisão. É portanto necessário ter bastante cuidado ao manusear a unidade.**
- **Não submeta esta unidade a vibrações ou choques. É necessário ter bastante cuidado na prevenção de vibrações ou choques, que poderiam causar danos, principalmente quando se liga a unidade ou durante o acesso ao disco rígido.**
- **Não desligue o fio da tomada elétrica quando a unidade estiver ligada ou durante qualquer gravação ou reprodução.**
- **Para uma detecção imediata de falhas, recomenda-se a realização de uma inspeção regular a cada ano.**

SVENSKA

TUNGA FÖREMÅL (T EX EN TV) FÅR ABSOLUT INTE PLACERAS OVANPÅ ENHETEN

RÖR INTE VID INSIDAN AV ENHETEN OCH STOPPA INTE IN NÅGRA FÖREMÅL I ENHETEN
Om du rör vid insidan av skåpet eller stoppar in främmande föremål utsätter du inte bara dig själv för fara, utan kan även orsaka omfattande skador på enheten.

SKYDDA STRÖMKABELN
Skador på strömkabeln kan orsaka brand eller elstötar. Om strömkabeln är skadad ska du slå av huvudströmmen och försiktigt koppla loss kabeln genom att hålla i kontakten.

STÄNG AV STRÖMMEN NÄR ENHETEN INTE SKA ANVÄNDAS UNDER EN LÄNGRE TID
Stäng av strömmen och dra ut kontakten när enheten inte ska användas under en längre tid.

SÖRJ FÖR GOD VENTILATION
Se till att de många ventilationshålen på enheten inte blockeras. För maximal ventilation ska du lämna fritt utrymme runt enheten och endast placera enheten på en stadig och jämn yta, samt se till att enheten inte täcks över när den används. Inga tunga föremål får placeras ovanpå enheten.

NÄR ENHETEN INTE ANVÄNDS
Glöm inte att ställa in huvudströmbrytaren MAIN i läge OFF, när denna apparat inte används.

UNDERHÅLL AV SKÅP
Använd aldrig rengöringsmedel som innehåller petroleum. Torka av skåpet med en mjuk tygtrasa som fuktats lätt med tvål och vatten. Torka av PVC-kablar och sladdar som inte bör tillåtas komma i kontakt med skåphöljet under längre perioder.

INSTALLATIONSPLATS
För bästa prestanda och varaktig driftssäkerhet bör du installera enheten på en plats som:
1. **Är välventilerad och inte utsätts för direkt solljus eller en direkt värmekälla.**
2. **Erbjuder en stabil, vibrationsfri yta.**
3. **Är fri från hög luftfuktighet, stora mängder damm samt magnetfält.**
4. **Kontrollera att ventilationsfläkten som sitter på enhetens bakre panel inte blockeras.**

OLÄMPLIGA INSTALLATIONSPLATSER
Om du placerar enheten på följande platser kan dess livstid förkortas:
- **Extremt kalla platser, t ex kylda magasin och fryshus.**
- **Platser där stora mängder svavelväte bildas, t ex trakter med heta källor.**
- **Platser eller områden där luften innehåller saltvatten.**

VARNING: FÖR ATT UNDVIKA BRAND ELLER ELSTÖTAR, FÅR DENNA APPARAT INTE UTSÄTTAS FÖR REGN ELLER FUKT. APPARATEN MÅSTE JORDAS.

Denna apparat uppfyller kraven angivna i EC-direktivet 89/336/EEG, "EMC Directive" och 73/23/EEG, "Low Voltage Directive", vilka ar andrade genom direktivet 93/68/EEG. Kraven om frekveneskanslighet enligt EN 55024 och kraven om storningar enligt EN 55022 ar iakttagna for anvandning pa bostadsomraden, affarsomraden, lattindustrifastigheter samt inom sma foretag saval innanfor som utanfor byggnader. Pa samtliga anvandningaplatser for denna apparat skall vara det allmanna lagspanningsnatet tillgangligt. Apparaten ar konstruerad enligt EN 60950.

Anmärkning angående konstruktionen av det övervakningssystem som använder den här enheten
- **Den här enheten kan styras av de externa apparaterna via RS-232C-uttaget eller ETHERNET-uttaget. Enheten kan också användas för att styra de externa apparaterna via RS-232C-uttaget. Tack vare dessa funktioner kan enheten på ett flexibelt sätt anpassas till avancerade säkerhetssystem, men det är också viktigt att komma ihåg att hela övervakningssystemet kan påverkas av funktionsstörningar hos den här enheten eller de externa apparaterna, som beror på innehållet i de inställningar som görs på den här enheten, eller på anslutningen mellan eller kombinationen av externa apparater.**
- **Vid uppsättningen av ett övervakningssystem med den här enheten rekommenderar vi att du först kontrollerar att enheten fungerar normalt med de andra apparater som är anslutna eller används i kombination med enheten respektive systemet.**
- **Vi rekommenderar att viktigt inspelat innehåll kopieras eller säkerhetskopieras till de andra apparaterna med jämna mellanrum.**
- **Skador som uppstått på grund av felaktig användning/drift av övervakningssystemet, eller förlust av data eller andra skador som beror på funktionsstörningar hos den här enheten täcks ej.**

Det kan förekomma fall då enhetens funktion för MOTION DETECTION (RÖRELSEDETEKTERING) inte fungerar ordentligt på grund av yttre omständigheter, videoingångssignal eller andra faktorer.

Användaren får inte ersättning för problem (t ex misslyckad inspelning eller uppspelning) som uppstår under drift med själva enheten eller en ansluten enhet. Därför rekommenderar vi att användaren regelbundet gör säkerhetskopior av viktiga inspelningar till skydd mot eventuella haverier och olyckor.

Inspelningstid och produktgaranti
Då du använder denna enhet, gäller indikationen om oavbruten inspelningstid och total tid på menyskärmen den oavbrutna inspelningstiden och inte garantiperioden. På samma sätt, gäller indikationen inte funktionsgarantin för de använda komponenterna.

- **Den har enheten har en inbyggd harddisk som ar valdigt kanslig. Var därför mycket försiktig vid hantering av denna enhet.**
- **Undvik att skaka eller stöta denna enhet häftigt. Om man gör sådant speciellt under tiden enheten är strömförd eller under åtkomst till hårdvaran kan fel uppstå i enheten.**
- **Drag aldrig ut stickproppen till nätströmmen under inspelning/återgivining eller under tiden enheten är ströförd.**
- **Det rekommenderas att låta underhålla enheten minst en gång varje år, så att eventuellt fel kan åtgärdas så tidigt som möjligt.**

РУССКИЙ

НИКОГДА НЕ СТАВЬТЕ НА АППАРАТ ТЯЖЕЛЫЕ ПРЕДМЕТЫ (НАПРИМЕР, ТЕЛЕВИЗОР)

НИКОГДА НЕ ПРИКАСАЙТЕСЬ И НЕ ВСТАВЛЯЙТЕ ВНУТРЬ АППАРАТА КАКИЕ-ЛИБО ПРЕДМЕТЫ

Прикосновение к внутренним частям аппарата внутри корпуса или вставка внутрь аппарата каких-либо посторонних предметов создает не только угрозу безопасности, но и может привести к сильному повреждению аппарата.

ПРЕДОХРАНЯЙТЕ СЕТЕВОЙ ШНУР

Повреждение сетевого шнура может привести к пожару или поражению электрическим током. В случае повреждения сетевого шнура, обесточьте аппарат, осторожно отсоединив сетевой шнур от штепсельной розетки, взявшись за штепсельную вилку.

ОТСОЕДИНИТЕ СЕТЕВОЙ ШНУР НА ВРЕМЯ ДЛИТЕЛЬНОГО ОТСУТСТВИЯ

Выключите питание и отсоедините сетевой шнур на время длительного отсутствия.

ОБЕСПЕЧЬТЕ ХОРОШУЮ ВЕНТИЛЯЦИЮ

Не закрывайте множество вентиляционных отверстий на аппарате. Для обеспечения максимальной вентиляции, следует оставить пространство вокруг аппарата и поместить аппарат на твердую ровную поверхность и проследить, чтобы он ничем не был закрыт во время эксплуатации. Никогда не ставьте на аппарат тяжелые предметы.

ЕСЛИ АППАРАТ НЕ ИСПОЛЬЗУЕТСЯ

Если аппарат не используется, всегда ВЫКЛЮЧАЙТЕ переключатель MAIN.

УХОД ЗА КОРПУСОМ

Никогда не используйте очистители на основе бензина. Для очистки аппарата используйте мягкую ткань, смоченную мылом, и водой и вытирайте его досуха. Полихлорвиниловые кабели или шнуры не следует оставлять в контакте с корпусом на длительное время.

МЕСТО ДЛЯ УСТАНОВКИ

Для обеспечения наилучших эксплуатационных качеств и надежности в течение длительного времени, установите аппарат в месте:-

1. Которое хорошо проветривается, находится вне попадания прямого солнечного света и вдали прямых источников тепла.
2. Поверхность которого не подвержена вибрации.
3. Которое не подвержено воздействию высокой влажности, чрезмерной пыли и магнитных полей.
4. Убедитесь, пожалуйста, что расположенный с задней стороны вентилятор ничем не закрыт.

НЕПОДХОДЯЩИЕ МЕСТА

Размещение аппарата в следующих местах может при вести к сокращению его срока службы:

- **Крайне холодных местах, типа холодильных или морозильных складов.**
- **Местах с чрезмерным выделением сероводорода, например, вблизи горячих источников.**
- **Местах с повышенной концентрацией соли в воздухе.**

ВНИМАНИЕ: ДЛЯ ПРЕДОТВРАЩЕНИЯ ПОЖАРА ИЛИ ПОРАЖЕНИЯ ЭЛЕКТРИЧЕСКИМ ТОКОМ, НЕ ПОДВЕРГАЙТЕ ДАННЫЙ АППАРАТ ВОЗДЕЙСТВИЮ ДОЖДЯ ИЛИ ВЛАГИ. ДАННЫЙ АППАРАТ ДОЛЖЕН БЫТЬ ЗАЗЕМЛЕН.

Данный аппарат соответствует требованиям Директивы ЕС 89/336/EEC, "Директиве относительно электромагнитной совместимости" и 73/23EEC,"Директиве низкого напряжения", с учетом поправок, внесенных Директивой 93/68/EEC. Требования относительно восприимчивости радиоэлектронных средств в соответствии со стандартами Европейского комитета по стандартизации EN 55024 и требования относительно помех в соответствии со стандартами Европейского комитета по стандартизации EN 55022, соблюдаются при эксплуатации в жилых районах, деловых районах, в небольших помещениях промышленного назначения и в малых промышленных предприятиях, как внутри, так и вне помещений. Все места характеризуются их связью с системами электропитания низкого напряжения бытового типа. Этот аппарат изготовлен в соответствии со стандартами Европейского комитета по стандартизации EN 60950.

Примечание относительно конструкции системы контроля с помощью данного аппарата

- **Данный аппарат можно контролировать с помощью внешних устройств через гнездо RS-232C или гнездо ETHERNET. Данный аппарат также можно использовать для контролирования внешних устройств через гнездо RS-232C. Благодаря этим функциям, данный аппарат относится к системе с высокой степенью надежности, однако на общий контроль системы может повлиять неисправность аппарата или же внешних устройств в зависимости от содержания установок данного аппарата или подсоединения, либо от комбинации между внешними устройствами.**
- **При выполнении конфигурации системы контроля с помощью данного аппарата, рекомендуется сначала убедиться в том, что аппарат нормально работает с другими подсоединенными устройствами или же в комбинации с ними.**
- **Рекомендуется периодически выполнять перезапись или же делать резервные копии важных записей на другие устройства.**
- **Ущерб вследствие функциональных ошибок системы контроля или же потеря записанных данных, а также любые другие виды ущерба вследствие неисправности данного аппарата не могут быть компенсированы.**

Возможны случаи, когда встроенная функция РЕГИСТРАЦИИ ДВИЖЕНИЯ не работает надлежащим образом вследствие внешних условий окружающей среды или входных видеосигналов, либо других факторов.

Пользователь не застрахован от различного рода проблем (например, прерывание записи или прерывание воспроизведения), которые могут возникнуть как в самом аппарате, так и в подсоединенном к нему оборудовании во время эксплуатации. Поэтому рекомендуется регулярно выполнять резервные копии важных записей в качестве меры предосторожности на случай возможных поломок аппарата или различного рода аварий.

Время записи и гарантия изделия

Непрерывное время записи и примерное время отображения на экране меню является непрерывным временем записи при эксплуатации данного аппарата и не представляет собой период гарантии изделия. К тому же, это не является периодом гарантируемой эксплуатации используемых деталей.

- **В данном аппарате используется встроенный жесткий диск, который является прецизионным устройством. Обращайтесь, пожалуйста, с данным аппаратом с надлежащей осторожностью.**
- **Не подвергайте данный аппарат воздействию вибраций или ударов. Это может привести к неисправности, поэтому, если аппарат включен или же при обращении к жесткому диску, требуется особая осторожность.**
- **Не отсоединяйте штепсельную вилку в то время, когда аппарат включен или во время записи или воспроизведения.**
- **Для своевременного выявления дефектов, рекомендуется обращаться за проверкой аппарата один раз в год.**

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